



VISHAY INTERTECHNOLOGY, INC.



RECTIFIERS

SELECTOR GUIDE

## RECTIFIERS

- Schottky Rectifiers
- Ultrafast Recovery Rectifiers
- Fast Recovery Rectifiers
- Standard Rectifiers
- Bridge Rectifiers

## SEMICONDUCTORS

### RECTIFIERS

Schottky (single, dual)  
 Standard, Fast, and Ultra-Fast Recovery  
 (single, dual)  
 Bridge  
 Superectifier®  
 Sinterglass Avalanche Diodes

### HIGH-POWER DIODES AND THYRISTORS\*

High-Power Fast-Recovery Diodes\*  
 Phase-Control Thyristors\*  
 Fast Thyristors\*

### SMALL-SIGNAL DIODES

Schottky and Switching (single, dual)  
 Tuner/Capacitance (single, dual)  
 Bandswitching  
 PIN

### ZENER AND SUPPRESSOR DIODES

Zener (single, dual)  
 TVS (TRANSZORB®, Automotive, ESD, Arrays)

### FETs

Low-Voltage TrenchFET® Power MOSFETs  
 High-Voltage TrenchFET® Power MOSFETs  
 High-Voltage Planar MOSFETs\*  
 JFETs

### RF TRANSISTORS

Bipolar Transistors (AF and RF)  
 Dual Gate MOSFETs  
 MOSMICs®

### OPTOELECTRONICS

IR Emitters and Detectors,  
 and IR Receiver Modules  
 Optocouplers and Solid-State Relays  
 Optical Sensors  
 LEDs and 7-Segment Displays  
 Infrared Data Transceiver Modules  
 Custom Products

### ICs

Power ICs  
 Analog Switches  
 RF Transmitter and Receiver Modules  
 ICs for Optoelectronics

### MODULES AND ASSEMBLIES

Automotive Modules and Assemblies\*  
 Power Modules (contain power diodes, thyristors,  
 MOSFETs, IGBTs)\*  
 DC/DC Converters

## PASSIVE COMPONENTS

### RESISTIVE PRODUCTS

Foil Resistors  
 Film Resistors  
     Metal Film Resistors  
     Thin Film Resistors  
     Thick Film Resistors  
     Metal Oxide Film Resistors  
     Carbon Film Resistors  
 Wirewound Resistors  
 Power Metal Strip® Resistors  
 Chip Fuses  
 Variable Resistors  
     Cermet Variable Resistors  
     Wirewound Variable Resistors  
     Conductive Plastic Variable Resistors  
 Networks/Arrays  
 Non-linear Resistors  
     NTC Thermistors  
     PTC Thermistors  
     Varistors

### MAGNETICS

Inductors  
 Transformers

### CAPACITORS

Tantalum Capacitors  
     Molded Chip Tantalum Capacitors  
     Coated Chip Tantalum Capacitors  
     Solid Through-Hole Tantalum Capacitors  
     Wet Tantalum Capacitors  
 Ceramic Capacitors  
     Multilayer Chip Capacitors  
     Disc Capacitors  
 Film Capacitors  
 Power Capacitors  
 Heavy-Current Capacitors  
 Aluminum Capacitors  
 Silicon RF Capacitors

### STRAIN GAGE TRANSDUCERS AND STRESS ANALYSIS SYSTEMS

PhotoStress®  
 Strain Gages  
 Load Cells  
 Force Transducers  
 Instruments  
 Weighing Systems  
 Specialized Strain Gage Systems

\*Closing of the planned acquisition of the power control systems business of International Rectifier is expected to occur before the end of March 2007, subject to customary closing conditions.

# Rectifiers

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## Table of Contents

Schottky Rectifiers .....	4
Ultrafast Recovery Rectifiers .....	9
Fast Recovery Rectifiers .....	13
Standard Rectifiers .....	15
Bridge Rectifiers .....	18
Rectifier Packages .....	20
Sample Package Construction .....	21

**Schottky Rectifiers** are the ideal product for high-speed and low power loss applications. Their metal-silicon junctions and majority carrier condition result in extremely fast recovery times (less than 10 ns) and very low forward voltage drops. Vishay's unique sputtered metallization process and ion implanted guarding technology result in a highly reliable Schottky product. We offer our customers the opportunity to select the best device for their applications by providing the flexibility of different barrier heights.

### TMBS™ (Trench MOS Barrier Schottky) Rectifiers

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(3)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>	
			Family <sup>(3)</sup>	Type		(V)	(A)
8	<b>V8P10</b>	G	Plastic SMD	TO-277A (SMPC)	100	0.68	8
10	<b>V10P10</b>	G	Plastic SMD	TO-277A (SMPC)	100	0.68	10
12	<b>V12P10</b>	G	Plastic SMD	TO-277A (SMPC)	100	0.70	12
20.0	<b>V20100S</b>	G	Plastic Power Pack	TO-220AB	100	0.85	20.0
	<b>VB20100S</b>	G	Power Pack SMD	TO-263AB (D2PAK)	100	0.85	20.0
	<b>VF20100S</b>	G	Isolated Power Pack	ITO-220AB	100	0.85	20.0
	<b>V120100S</b>	G	Power Pack SMD	TO-262AA	100	0.85	20.0
	<b>V20100SG</b>	G	Plastic Power Pack	TO-220AB	100	0.97	20.0
	<b>VF20100SG</b>	G	Isolated Power Pack	ITO-220AB	100	0.97	20.0
	<b>V120100SG</b>	G	Power Pack SMD	TO-262AA	100	0.97	20.0
	<b>V20120S</b>	G	Plastic Power Pack	TO-220AB	120	1.03	20.0
	<b>VF20120S</b>	G	Isolated Power Pack	ITO-220AB	120	1.03	20.0
	<b>V120120S</b>	G	Power Pack SMD	TO-262AA	120	1.03	20.0
	<b>V20120SG</b>	G	Plastic Power Pack	TO-220AB	120	1.23	20.0
	<b>VF20120SG</b>	G	Isolated Power Pack	ITO-220AB	120	1.23	20.0
30	<b>V30100S</b>	G	Plastic Power Pack	TO-220AB	100	0.85	30
	<b>VF30100S</b>	G	Isolated Power Pack	ITO-220AB	100	0.85	30
	<b>VB30100S</b>	G	Power Pack SMD	TO-263AB (D2PAK)	100	0.85	30
	V130100S	G	Power Pack SMD	TO-262AA	100	0.85	30
40	VTS40100CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	100	0.73	20
	VF40100C	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	100	0.61	20
	<b>VB40100C</b>	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D2PAK)	100	0.61	20
	<b>V140100C</b>	G	Power Pack SMD <sup>(2)</sup>	TO-262AA	100	0.61	20
	<b>V40100G</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	100	0.81	20
	<b>VB40100G</b>	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D2PAK)	100	0.81	20
	<b>V140100G</b>	G	Power Pack SMD <sup>(2)</sup>	TO-262AA	100	0.81	20
	<b>V40120C</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	120	0.84	20
	<b>VB40120C</b>	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D2PAK)	120	0.84	20
	<b>V140120C</b>	G	Power Pack SMD <sup>(2)</sup>	TO-262AA	120	0.84	20
	<b>V40100P</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	100	0.73	20
	<b>V40100PG</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	100	0.80	20
50	V50100P	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	100	0.78	25
60	V60100C	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	100	0.66	30
	<b>V60120C</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	120	0.95	30
	<b>V60100P</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	100	0.79	30
80	<b>V80100P</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	100	0.78	40

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T = Formerly Vishay Telefunken® (Telefunken® is a registered trademark of Electro Holding GMBH)

→ = Transferred



I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(5)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>	
			Family <sup>(3)</sup>	Type		(V)	(A)
0.5	MBR0520L	G → T	Plastic SMD	SOD-123	20	0.385	0.5
	MBR0530	G → T	Plastic SMD	SOD-123	30	0.43	0.5
	MBR0540	G → T	Plastic SMD	SOD-123	40	0.51	0.5
0.6	SB020 - SB060	G	Plastic Axial	MPG06	20 - 60	0.55 / 0.70	0.6
1.0	1N5817 - 1N5819	G	Plastic Axial	DO-204AL (DO-41)	20 - 40	0.45 - 0.60	1.0
	BYM13-xx	G	Plastic SMD	DO-213AB (MELF)	20 - 60	0.50 - 0.70	1.0
	SB120 - SB160	G	Plastic Axial	DO-204AL (DO-41)	20 - 60	0.48 - 0.65	1.0
	SB120A - SB160A	G	Plastic Axial	DO-204AL (DO-41)	20 - 60	0.50 - 0.70	1.0
	SB1H90 - SB1H100	G	Plastic Axial	DO-204AL (DO-41)	90 - 100	0.77	1.0
	SGL41-xx	G	Plastic SMD	DO-213AB (MELF)	20 - 60	0.50 - 0.70	1.0
	SS12 - SS16	G	Plastic SMD	DO-214AC (SMA)	20 - 60	0.50 - 0.75	1.0
	B120 - B160	G	Plastic SMD	DO-214AC (SMA)	20 - 60	0.52 - 0.75	1.0
	SS1H9 - SS1H10	G	Plastic SMD	DO-214AC (SMA)	90 - 100	0.77	1.0
	SS1P3L - SS1P4L	G	Plastic SMD	DO-220AA (SMP)	30 - 40	0.45 - 0.48	1.0
<b>SS1P3 - SS1P4</b>	G	Plastic SMD	DO-220AA (SMP)	30 - 40	0.50 - 0.53	1.0	
1.1	SL02 - SL04	G → T	Plastic SMD	DO-219 (SMF)	20 - 40	0.41 / 0.45 / 0.53	1.1
1.5	BYS10-xx	T → G	Plastic SMD	DO-214AC (SMA)	25 - 45	0.5	1.0
	BYS11-90	T → G	Plastic SMD	DO-214AC (SMA)	90	0.9	1.0
	BYS12-90	T → G	Plastic SMD	DO-214AC (SMA)	90	0.75	1.0
	S397D	T → G	Plastic SMD	DO-214AC (SMA)	60	0.75	1.0
	SL12 - SL13	G	Plastic SMD	DO-214AC (SMA)	20 - 30	0.36 / 0.445	0.1 / 1.0
	SS29 - SS210	G	Plastic SMD	DO-214AA(SMB)	90 - 100	0.75	1.0
2.0	SB220 - SB260	G	Plastic Axial	DO-204AC (DO-15)	20 - 60	0.5 / 0.68	2.0
	<b>SB220S - SB260S</b>	G	Plastic Axial	DO-204AL (DO-41)	20 - 60	0.55 / 0.70	2.0
	SB2H90 - SB2H100	G	Plastic Axial	DO-204AC (DO-15)	90 - 100	0.79	2.0
	<b>B230LA &amp; B240A</b>	G	Plastic SMD	DO-214AC (SMA)	20 - 60	0.50 - 0.55	2.0
	SL22 - SL23	G	Plastic SMD	DO-214AA (SMB)	20 - 30	0.395 / 0.44	1.0 / 2.0
	SS22 - SS26	G	Plastic SMD	DO-214AA (SMB)	20 - 60	0.50 - 0.75	2.0
	SS2H9 - SS2H10	G	Plastic SMD	DO-214AA (SMB)	90 - 100	0.79	2.0
	SS2P2 - SS2P4	G	Plastic SMD	DO-220AA (SMP)	20 - 40	0.55	2.0
	SS2P2L - SS2P3L	G	Plastic SMD	DO-220AA (SMP)	20 - 30	0.50	2.0
	SS2P5 - SS2P6	G	Plastic SMD	DO-220AA (SMP)	50 - 60	0.70	2.0
	SS2PH9 - SS2PH10	G	Plastic SMD	DO-220AA (SMP)	90 - 100	0.80	2.0
SSA23L & SSA24	G	Plastic SMD	DO-214AC (SMA)	30 - 40	0.45 - 0.49	2.0	
3.0	<b>B330LA &amp; B340A</b>	G	Plastic SMD	DO-214AC (SMA)	20 - 60	0.50 - 0.55	3.0
	1N5820 - 1N5822	G	Plastic Axial	DO-201AD	20 - 40	0.475 - 0.525	3.0
	SB320 - SB360	G	Plastic Axial	DO-201AD	20 - 60	0.49 - 0.68	3.0
	<b>SB320A - SB360A</b>	G	Plastic Axial	DO-201 AD	20 - 60	0.50 / 0.70	3.0
	SB320S - SB360S	G	Plastic Axial	DO-204AC (DO-15)	20 - 60	0.50 - 0.70	3.0
	SB3H90 - SB3H100	G	Plastic Axial	DO-201AD	90 - 100	0.8	3.0
	SS32 - SS36	G	Plastic SMD	DO-214AB (SMC)	20 - 60	0.5 - 0.75	3.0
	SS3H9 - SS3H10	G	Plastic SMD	DO-214AB (SMC)	90 - 100	0.8	3.0
	SS3P3	G	Plastic SMD	DO-220AA (SMP)	30	0.58	3.0
	SS3P4	G	Plastic SMD	DO-220AA (SMP)	40	0.60	3.0
	<b>SS3P5 &amp; SS3P6</b>	G	Plastic SMD	DO-220AA (SMP)	40	0.6	3.0
	<b>SSA33L &amp; SSA34</b>	G	Plastic SMD	DO-214AC (SMA)	30 - 40	0.45 - 0.49	3.0

Notes:

- (1) **Bold Text** = New Products
- (2) Dual center-tapped device (V<sub>F</sub> limit @ I<sub>F</sub> is per leg)
- (3) All Schottky die are planar with oxide passivation
- (4) 35 V – 45 V product / 50 V – 60 V product
- (5) Source: G = Formerly General Semiconductor®  
T = Formerly Vishay Telefunken® (Telefunken® is a registered trademark of Electro Holding GMBH)  
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I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(5)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>	
			Family <sup>(3)</sup>	Type		(V)	(A)
3.0 (cont'd)	<b>SS3P3L &amp; SS3P4L</b>	G	Plastic SMD	TO-277A (SMPC)	30 - 40	0.47	3.0
	<b>SS3P5L &amp; SS3P6L</b>	G	Plastic SMD	TO-277A (SMPC)	50 - 60	0.60	3.0
4.0	SL42 - SL43	G	Plastic SMD	DO-214AB (SMC)	20 - 30	0.42 / 0.47	4.0 / 8.0
	SL44	G	Plastic SMD	DO-214AB (SMC)	40	0.44 / 0.50	4.0 / 8.0
	<b>SSB43L &amp; SSB44</b>	G	Plastic SMD	DO-214AA (SMB)	30 - 40	0.45 - 0.49	4.0
5.0	SB520 - SB560	G	Plastic Axial	DO-201AD	20 - 60	0.48 - 0.65	5.0
	SB520A - SB560A	G	Plastic Axial	DO-201AD	20 - 60	0.50 - 0.70	5.0
	SB5H90 - SB5H100	G	Plastic Axial	DO-201AD	90 - 100	0.8	5.0
	SSC53L & SSC54	G	Plastic SMD	DO-214AB (SMC)	30 - 40	0.45 - 0.49	5.0
	<b>SS5P3 &amp; SS5P4</b>	G	Plastic SMD	TO-277A (SMPC)	50 - 60	0.52	5.0
	<b>SS5P5 &amp; SS5P6</b>	G	Plastic SMD	TO-277A (SMPC)	50 - 60	0.69	5.0
	<b>SS5P9 &amp; SS5P10</b>	G	Plastic SMD	TO-277A (SMPC)	90 - 100	0.60	3.0
7.5	MBR735 - MBR760	G	Plastic Power Pack	TO-220AC	35 - 60	0.84 / 0.75 <sup>(4)</sup>	15 / 7.5
	MBRB735 - MBRB760	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.84 / 0.75 <sup>(4)</sup>	15 / 7.5
	MBRF735 - MBRF760	G	Isolated Power Pack	ITO-220AC	35 - 60	0.84 / 0.75 <sup>(4)</sup>	15 / 7.5
	MBR7H35 - MBR7H60	G	Plastic Power Pack	TO-220AC	35 - 60	0.63 / 0.73 <sup>(4)</sup>	7.5
	MBRB7H35 - MBRB7H60	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.63 / 0.73 <sup>(4)</sup>	7.5
	MBRF7H35 - MBRF7H60	G	Isolated Power Pack	ITO-220AC	35 - 60	0.63 / 0.73 <sup>(4)</sup>	7.5
8	<b>SS8P2L &amp; SS8P3L</b>	G	Plastic SMD	TO-277A (SMPC)	20 - 30	0.57	8.0
	<b>SS8PH9 &amp; SS8PH10</b>	G	Plastic SMD	TO-277A (SMPC)	90 - 100	0.89	8.0
10	MBR1035 - MBR1060	G	Plastic Power Pack	TO-220AC	35 - 60	0.84 / 0.80 <sup>(4)</sup>	20 / 10
	MBRB1035 - MBRB1060	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.84 / 0.80 <sup>(4)</sup>	20 / 10
	MBRF1035 - MBRF1060	G	Isolated Power Pack	ITO-220AC	35 - 60	0.84 / 0.80 <sup>(4)</sup>	20 / 10
	MBR10H35 - MBR10H60	G	Plastic Power Pack	TO-220AC	35 - 60	0.63 / 0.71 <sup>(4)</sup>	10
	MBRB10H35 - MBRB10H60	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.63 / 0.71 <sup>(4)</sup>	10
	MBRF10H35 - MBRF10H60	G	Isolated Power Pack	ITO-220AC	35 - 60	0.63 / 0.71 <sup>(4)</sup>	10
	MBR1090 - MBR10100	G	Plastic Power Pack	TO-220AC	90 - 100	0.8	10
	MBRB1090 - MBRB10100	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	90 - 100	0.8	10
	MBRF1090 - MBRF10100	G	Isolated Power Pack	ITO-220AC	90 - 100	0.8	10
	MBR1090CT - MBR10100CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	90 - 100	0.85	5.0
	MBRF1090CT - MBRF10100CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	90 - 100	0.85	5.0
	MBR10H90 - MBR10H100	G	Plastic Power Pack	TO-220AC	90 - 100	0.77	10
	MBRB10H90 - MBRB10H100	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	90 - 100	0.77	10
	MBRF10H90 - MBRF10H100	G	Isolated Power Pack	ITO-220AC	90 - 100	0.77	10
	MBR10H90CT - MBR10H100CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	90 - 100	0.76	5.0
	MBRB10H90CT - MBRB10H100CT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	90 - 100	0.76	5.0
	MBRF10H90CT - MBRF10H100CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	90 - 100	0.76	5.0
	MBR10H150CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	150	0.88	5.0
	<b>SB10H150CT-1</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-262AA	150	0.88	5.0
	MBRF10H150CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	150	0.88	5.0
	SBL1030 - SBL1040	G	Plastic Power Pack	TO-220AC	30 - 40	0.55	10
	SBLB1030 - SBLB1040	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	30 - 40	0.55	10
	SBLF1030 - SBLF1040	G	Isolated Power Pack	ITO-220AC	30 - 40	0.55	10
	SBL1030CT - SBL1040CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	30 - 40	0.55	5.0
SBLB1030CT - SBLB1040CT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	30 - 40	0.55	5.0	
SBLF1030CT - SBLF1040CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	30 - 40	0.55	5.0	

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			Family <sup>(3)</sup>	Type		(V)	(A)
10 (cont'd)	SBL10L25	G	Plastic Power Pack	TO-220AC	25	0.46	10
	SBLB10L25	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	25	0.46	10
	SBLF10L25	G	Isolated Power Pack	ITO-220AC	25	0.46	10
	SBL10L30	G	Plastic Power Pack	TO-220AC	30	0.52	10
	SBLB10L30	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	30	0.52	10
15	SBLF10L30	G	Isolated Power Pack	ITO-220AC	30	0.52	10
	MBRB1535CT - MBRB1560CT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.84 / 0.75 <sup>(4)</sup>	15 / 7.5
	MBRF1535CT - MBRF1560CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.84 / 0.75 <sup>(4)</sup>	15 / 7.5
	MBR15H35CT - MBR15H60CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	35 - 60	0.63 / 0.73 <sup>(4)</sup>	7.5
	MBRB15H35CT - MBRB15H60CT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.63 / 0.73 <sup>(4)</sup>	7.5
16	MBRF15H35CT - MBRF15H60CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.63 / 0.73 <sup>(4)</sup>	7.5
	MBR1635 - MBR1660	G	Plastic Power Pack	TO-220AC	35 - 60	0.63 / 0.75 <sup>(4)</sup>	16
	MBRB1635 - MBRB1660	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.63 / 0.75 <sup>(4)</sup>	16
	MBRF1635 - MBRF1660	G	Isolated Power Pack	ITO-220AC	35 - 60	0.63 / 0.75 <sup>(4)</sup>	16
	MBR16H35 - MBR16H60	G	Plastic Power Pack	TO-220AC	35 - 60	0.66 / 0.73 <sup>(4)</sup>	16
	MBRB16H35 - MBRB16H60	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.66 / 0.73 <sup>(4)</sup>	16
	MBRF16H35 - MBRF16H60	G	Isolated Power Pack	ITO-220AC	35 - 60	0.66 / 0.73 <sup>(4)</sup>	16
	SBL1630CT - SBL1640CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	30 - 40	0.55	8.0
SBLB1630CT - SBLB1640CT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	30 - 40	0.55	8.0	
20	SBLF1630CT - SBLF1640CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	30 - 40	0.55	8.0
	MBR2035CT - MBR2060CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	35 - 60	0.84 / 0.80 <sup>(4)</sup>	20 / 10
	MBRB2035CT - MBRB2060CT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.84 / 0.80 <sup>(4)</sup>	20 / 10
	MBRF2035CT - MBRF2060CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.84 / 0.80 <sup>(4)</sup>	20 / 10
	MBR20H35CT - MBR20H60CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	35 - 60	0.63 / 0.71 <sup>(4)</sup>	10
	MBRB20H35CT - MBRB20H60CT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.63 / 0.71 <sup>(4)</sup>	10
	MBRF20H35CT - MBRF20H60CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.63 / 0.71 <sup>(4)</sup>	10
	MBR2090CT - MBR20100CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	90 - 100	0.80	10
	MBRB2090CT - MBRB20100CT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	90 - 100	0.80	10
	MBRF2090CT - MBRF20100CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	90 - 100	0.80	10
	MBR20H90CT - MBR20H100CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	90 - 100	0.77	10
	MBRB20H90CT - MBRB20H100CT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	90 - 100	0.77	10
	MBRF20H90CT - MBRF20H100CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	90 - 100	0.77	10
	MBR20H90CTG - MBR20H100CTG	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	90 - 100	0.85	10
	MBRB20H90CTG - MBRB20H100CTG	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	90 - 100	0.85	10
	MBRF20H90CTG - MBRF20H100CTG	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	90 - 100	0.85	10
	MBR20H150CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	150	0.90	10
	<b>SB20H150CT-1</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-262AA	150	0.90	10
	MBRF20H150CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	150	0.90	10
	MBR20H200CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	200	0.88	10

Notes:

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- (3) All Schottky die are planar with oxide passivation
- (4) 35 V – 45 V product / 50 V – 60 V product
- (5) Source: G = Formerly General Semiconductor®  
 T = Formerly Vishay Telefunken® (Telefunken® is a registered trademark of Electro Holding GMBH)  
 → = Transferred

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(5)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>	
			Family <sup>(3)</sup>	Type		(V)	(A)
20 (cont'd)	<b>SB20H200CT-1</b>	G	Power Pack SMD <sup>(2)</sup>	TO-262AA	200	0.88	10
	MBRF20H200CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	200	0.88	10
	<b>M2035S &amp; M2045S</b>	G	Plastic Power Pack	TO-220AB	35 - 45	0.7	20.0
	SBLB2030CT - SBL2040CT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	30 - 40	0.55	10
	SBLF2030CT - SBL2040CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	30 - 40	0.55	10
25	SBL2030PT - SBL2040PT	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	30 - 40	0.55	10
	SBL25L20CT - SBL25L30CT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	20 - 30	0.49	12.5
	SBLB25L20CT - SBLB25L30CT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	20 - 30	0.49	12.5
25	SBLF25L20CT - SBLF25L30CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	20 - 30	0.49	12.5
	<b>M2535CT - M2560CT</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	35 - 60	0.82 / 0.75 <sup>(4)</sup>	30 / 15
30	<b>MBRB2535CT - MBRB2560CT</b>	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.82 / 0.75 <sup>(4)</sup>	30 / 15
	MBRF2535CT - MBRF2560CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.82 / 0.75 <sup>(4)</sup>	30 / 15
	<b>MBR25H35CT - MBR25H60CT</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	35 - 60	0.64 / 0.70 <sup>(4)</sup>	15
	<b>MBRB25H35CT - MBRB25H60CT</b>	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.64 / 0.70 <sup>(4)</sup>	15
	MBRF25H35CT - MBRF25H60CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.64 / 0.70 <sup>(4)</sup>	15
	<b>M3035CT - M3045CT</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	35 - 45	0.76	30
	<b>MBRB3035CT - MBRB3045CT</b>	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 45	0.76	30
	MBRF3035CT - MBRF3045CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	35 - 45	0.76	30
	<b>M30H35CT - M30H60CT</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	35 - 60	0.62 / 0.68 <sup>(4)</sup>	15
	<b>MBRB30H35CT - MBRB30H60CT</b>	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	35 - 60	0.62 / 0.68 <sup>(4)</sup>	15
	MBRF30H35CT - MBRF30H60CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	35 - 60	0.62 / 0.68 <sup>(4)</sup>	15
	<b>M3035PT - M3060PT</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	35 - 60	0.76 / 0.75 <sup>(4)</sup>	30 / 20
	<b>M30H35PT - M30H60PT</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	35 - 60	0.66 / 0.74 <sup>(4)</sup>	20
	<b>M30H90PT - M30H100PT</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	90 - 100	0.84	15
	<b>M30H150CT</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	150	0.90	15
	<b>SB30H150CT-1</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-262AA	150	0.90	15
	MBRF30H150CT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	150	0.90	15
	<b>M3035S - M3045S</b>	G	Plastic Power Pack	TO-220AB	35 - 45	0.7	30.0
	<b>M1300356 - M13045S</b>	G	Plastic Power Pack	TO-262AA	35 - 45	0.7	30.0
	SBL3030PT - SBL3040PT	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	30 - 40	0.55	15
SD241P	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	45	0.47 / 0.60	10 / 20 (125 °C)	
40	<b>M304035PT - M304060PT</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	35 - 60	0.70 / 0.72 <sup>(4)</sup>	20
	<b>M3040H35PT - M3040H60PT</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	35 - 60	0.63 / 0.69 <sup>(4)</sup>	20
	SBL4030PT - SBL4040PT	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	30 - 40	0.58	20
60	<b>M60100CT</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	100	0.78	30
	<b>M6035C - M6060C</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	35 - 60	0.61 / 0.65 <sup>(4)</sup>	30.0
	<b>M6035P - M6060P</b>	G	Plastic Power Pack <sup>(2)</sup>	TO-247AD (TO-3P)	35 - 60	0.60 / 0.64 <sup>(4)</sup>	30.0

Notes:

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(3) All Schottky die are planar with oxide passivation

(4) 35 V - 45 V product / 50 V - 60 V product

(5) Source: G = Formerly General Semiconductor®

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**Ultrafast Recovery Rectifiers** have very fast reverse recovery times (as low as 15 ns) and voltage levels as high as 1500 V. They are ideally suited for very high frequency switching power supplies, inverters, and freewheeling diodes. Both platinum-doped types with excellent high-temperature leakage current and gold-doped types for soft reverse recovery with excellent recovery temperature stability are offered.

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>		t <sub>rr</sub> (ns)
			Family	Type		(V)	(A)	
0.5	BYM07-xxx	G	SUPERECTIFIER® SMD	DO-213AA (MiniMELF)	50 - 400	1.25 / 1.35	0.5	50
	EGL34y	G	SUPERECTIFIER® SMD	DO-213AA (MiniMELF)	50 - 400	1.25 / 1.35	0.5	50
0.6	UG06y	G	Plastic Axial <sup>(2)</sup>	MPG06	50 - 200	0.95	0.6	15
1.0	BYM12-xxx	G	SUPERECTIFIER® SMD	DO-213AB (MELF)	50 - 400	1.0 / 1.25	1.0	50
	BYV26A-E	T	Sinterglass Axial	SOD57	200 - 1000	2.5	1.0	30 / 75
	BYV26DGP & EGP	G	SUPERECTIFIER® Axial	DO-204AC (DO-15)	800 - 1000	2.5	1.0	75
	EGF1y	G	SUPERECTIFIER® SMD	DO-214BA (GF1)	50 - 200	1.0	1.0	50
	EGF1T	G	SUPERECTIFIER® SMD	DO-214BA (GF1)	1300	3.0	1.0	75
	EGL41y	G	SUPERECTIFIER® SMD	DO-213AB (MELF)	50 - 400	1.0 / 1.25	1.0	50
	EGP10x	G	SUPERECTIFIER® Axial	DO-204AL (DO-41)	50 - 400	0.95 / 1.25	1.0	50
	ES1y	G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	50 - 200	0.92	1.0	15
	ES1Py	G	Plastic SMD <sup>(2)</sup>	DO-220AA (SMP)	50 - 200	0.865 / 0.92	0.6 / 1.0	15
	ESH1y	G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	100 - 200	0.87 / 0.90	0.7 / 1.0	25
	FGP10B-FGP10D	G	SUPERECTIFIER® Axial	DO-204AL (DO-41)	100 - 200	0.95	1.0	35
	ESH1Py	G	Plastic SMD <sup>(2)</sup>	DO-220AA (SMP)	100 - 200	0.86 / 0.90	0.7 / 1.0	25
	FE1y	G → T	Sinterglass Axial	DO-204AP	50 - 200	0.95	1.0	35
	GI1001 - GI1004	G → T	Sinterglass Axial	DO-204AP	50 - 200	0.975	1.0	25
	MUR120	G	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	200	0.875	1.0	25
	MUR140 - MUR160	G	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	400 - 600	1.25	1.0	50
	MURS120	G	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	200	0.875	1.0	25
	MURS140 - MURS160	G	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	400 - 600	1.25	1.0	50
	SBYV26C	G	SUPERECTIFIER® Axial	DO-204AL (DO-41)	600	2.5	1.0	30
	SF4001 - SF4007	T	Sinterglass Axial	SOD57	50 - 1000	1.0 / 1.7	1.0	50 / 75
	SF1200 / SF1600	T	Sinterglass Axial	SOD57	1200 / 1600	3.4	1.0	75
	UF4001 - UF4007	G	Plastic Axial <sup>(2)</sup>	DO-204AL (DO-41)	50 - 1000	1.0 / 1.7	1.1	50 / 75
	UG1y	G	Plastic Axial <sup>(2)</sup>	DO-204AL (DO-41)	50 - 200	0.95	1.0	15
US1y	G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	50 - 1000	1.0 / 1.7	1.1	50 / 75	
1.5	BYG20y	T → G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	200 - 600	1.3	1.0	75
	BYG23M	T → G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	1000	1.7	1.0	75
	SUF15y	G	Plastic Axial <sup>(2)</sup>	GP20	400 & 600	1.8	1.5	35
1.9	BYT53y	T	Sinterglass Axial	SOD57	50 - 400	1.1	1.0	50

Notes:

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"x" designates a number that indicates voltage or is part of a sequence

"y" designates reverse voltage, where:

A=50 V C=150 V F=300 V H=500 V

B=100 V D=200 V G=400 V J=600 V

(2) Glass passivated die

(3) Dual center-tapped device (V<sub>F</sub> limit @ I<sub>F</sub> is per leg)

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→ = Transferred

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>		t <sub>rr</sub> (ns)
			Family	Type		(V)	(A)	
2.0	BYG22y	T → G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	50 - 200	1.1	2.0	25
	BYV27/50 - 600	T	Sinterglass Axial	SOD57	50 - 600	1.07 / 135	3.0	25 / 40
	EGP20y	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	50 - 400	0.95 / 1.25	2.0	50
	ES2A - ES2D	G	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	50 - 200	0.9	2.0	20
	ES2F - ES2G	G	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	300 - 400	1.1	2.0	35
	ESH2A - ESH2D	G	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	100 - 200	0.93	2.0	25
	<b>MURS240 - MURS260</b>	G	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	400-600	1.45	2	50
	<b>USB260</b>	G	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	600	1.60	2	30
	FE2y	G → T	Sinterglass Axial	DO-204AP	50 - 200	0.95	2.0	35
	FGP20B - FGP20D	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	100 - 200	0.95	2.0	35
	SBYV27-xxx	G	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	50 - 200	1.07	3.0	15
	UG2y	G	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	50 - 200	0.95	2.0	15
	<b>UG2F &amp; UG2G</b>	G	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	300-400	1.10	2	35
3.0	31GF4	G	Plastic Axial <sup>(2)</sup>	DO-201AD	400	1.25	3.0	30
	31GF6	G	Plastic Axial <sup>(2)</sup>	DO-201AD	600	1.6	3.0	30
	BYW178	T	Sinterglass Axial	SOD64	800	1.9	3.0	60
	EGP30y	G	SUPERECTIFIER <sup>®</sup> Axial	GP20	50 - 400	0.95 / 1.25	3.0	50
	ES3y	G	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	50 - 200	0.9	3.0	20
	ES3F - ES3G	G	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	300 - 400	1.1	3.0	35
	ESH3A - ESH3D	G	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	100 - 200	0.90	3.0	25
	FE3y	G → T	Sinterglass Axial	G4	50 - 200	0.95	3.0	35
	FGP30B - FGP30D	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	100 - 200	0.95	3.0	35
	MURS320	G	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	200	0.875	3.0	25
	MURS340 - MURS360	G	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	400 & 600	1.25 / 1.28	3.0 / 4.0	50
	SF5400 - SF5407	T	Sinterglass Axial	SOD64	50 - 1000	1.1 / 1.7	3.0	50 / 75
	SUF30y	G	Plastic Axial <sup>(2)</sup>	P600	400 & 600	1.8 / 2.0	3.0	35
UF5400 - UF5408	G	Plastic Axial <sup>(2)</sup>	DO-201AD	50 - 1000	1.0 / 1.7	3.0	50 / 75	
3.5	BYV28/50-600	T	Sinterglass Axial	SOD64	50 - 600	1.1 / 1.35	5.0	30 / 50
	SBYV28-xxx	G	Plastic Axial <sup>(2)</sup>	DO-201AD	50 - 200	1.1	3.5	20
4.0	MUR420	G	Plastic Axial <sup>(2)</sup>	DO-201AD	200	0.89	4.0	25
	MUR440 - MUR460	G	Plastic Axial <sup>(2)</sup>	DO-201AD	400 - 600	1.28	4.0	50
	UG4y	G	Plastic Axial <sup>(2)</sup>	DO-201AD	50 - 200	0.95	4.0	20
5.0	EGP50y	G	SUPERECTIFIER <sup>®</sup> Axial	GP20	50 - 400	0.95 / 1.25	5.0	50
	FGP50B - FGP50D	G	SUPERECTIFIER <sup>®</sup> Axial	GP20	100 - 200	0.95	5.0	35
	FE5y	G → T	Sinterglass Axial	G4	50 - 200	0.95	5.0	35
	GUR5H60	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	600	1.8	5.0	30
	GURB5H60	G	Power Pack SMD <sup>(2)</sup>	TO-263AB(D <sup>2</sup> PAK)	600	1.8	5.0	30
	GURF5H60	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	600	1.8	5.0	30
	UG5HT - UG5JT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	500 - 600	1.75	5.0	25
	UGB5HT - UGB5JT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB(D <sup>2</sup> PAK)	500 - 600	1.75	5.0	25
UGF5HT - UGF5JT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	500 - 600	1.75	5.0	25	

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I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>		t <sub>rr</sub> (ns)
			Family	Type		(V)	(A)	
6.0	FE6y	G → T	Sinterglass Axial	G4	50 - 200	0.975	6.0	35
	FEP6yT	G	Plastic Power Pack <sup>(2)(3)</sup>	TO-220AB	50 - 200	0.975	3.0	35
	FEPB6yT	G	Power Pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 200	0.975	3.0	35
	FEPF6yT	G	Isolated Power Pack <sup>(2)(3)</sup>	ITO-220AB	50 - 200	0.975	3.0	35
8.0	BYV29-xxx	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	300 - 400	1.3	8.0	35
	BYV29B-xxx	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	300 - 400	1.3	8.0	35
	BYV29F-xxx	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	300 - 400	1.3	8.0	35
	BYW29-xx	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	50 - 200	1.3	8.0	25
	BYWB29-xx	G	Power Pack SMD <sup>(2)</sup>	TO-263AB(D <sup>2</sup> PAK)	50 - 200	1.3	8.0	25
	BYWF29-xx	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	50 - 200	1.3	8.0	25
	FES8yT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
	FESB8yT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
	FESF8yT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
	G11401 - G11404	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	50 - 200	0.975	8.0	35
	G1B1401 - G1B1404	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 200	0.975	8.0	35
	UG8AT - UG8DT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	50 - 200	1.0	8.0	20
	UGB8AT - UGB8DT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 200	1.0	8.0	20
	UGF8AT - UGF8DT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	50 - 200	1.0	8.0	20
	UG8FT - UG8GT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	300 - 400	1.3	8.0	35
	UGB8FT - UGB8GT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	300 - 400	1.3	8.0	35
	UGF8FT - UGF8GT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	300 - 400	1.3	8.0	35
	UG8HT - UG8JT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	500 - 600	1.75	8.0	25
	UGB8HT - UGB8JT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	500 - 600	1.75	8.0	25
	UGF8HT - UGF8JT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	500 - 600	1.75	8.0	25
UG8HCT - UG8JCT	G	Plastic Power Pack <sup>(2)(3)</sup>	TO-220AB	500 - 600	1.75	4.0	25	
UGB8HCT - UGB8JCT	G	Power Pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	500 - 600	1.75	4.0	25	
UGF8HCT - UGF8JCT	G	Isolated Power Pack <sup>(2)(3)</sup>	ITO-220AB	500 - 600	1.75	4.0	25	
<b>UH8JT</b>	G	Plastic Power Pack	TO-220AC	600	3.0	8	25	
<b>UHF8JT</b>	G	Isolated Power Pack	ITO-220AC	600	3.0	8	25	
10	BYQ28E-xxx	G	Power Pack SMD <sup>(2)(3)</sup>	TO-220AB	100 - 200	1.1	5.0	25
	BYQ28EB-xxx	G	Power Pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	100 - 200	1.1	5.0	25
	BYQ28EF-xxx	G	Isolated Power Pack <sup>(2)(3)</sup>	ITO-220AB	100 - 200	1.1	5.0	25
	BYT28-xxx	G	Plastic Power Pack <sup>(2)(3)</sup>	TO-220AB	300 - 400	1.3	5.0	35
	BYT28B-xxx	G	Power Pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	300 - 400	1.3	5.0	35
	BYT28F-xxx	G	Isolated Power Pack <sup>(2)(3)</sup>	ITO-220AB	300 - 400	1.3	5.0	35
	UG10BCT - UG10DCT	G	Plastic Power Pack <sup>(2)(3)</sup>	TO-220AB	100 - 200	1.1	5.0	25
	UGB10BCT - UGB10DCT	G	Power Pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	100 - 200	1.1	5.0	25
	UGF10BCT - UGF10DCT	G	Isolated Power Pack <sup>(2)(3)</sup>	ITO-220AB	100 - 200	1.1	5.0	25
	UG10FCT - UG10GCT	G	Plastic Power Pack <sup>(2)(3)</sup>	TO-220AB	300 - 400	1.3	5.0	35
	UGB10FCT - UGB10GCT	G	Power Pack SMD <sup>(2)(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	300 - 400	1.3	5.0	35
	UGF10FCT - UGF10GCT	G	Isolated Power Pack <sup>(2)(3)</sup>	ITO-220AB	300 - 400	1.3	5.0	35
	<b>UH10JT</b>	G	Plastic Power Pack	TO-220AC	600	2.8	10	25
	<b>UHF10JT</b>	G	Isolated Power Pack	ITO-220AC	600	2.8	10	25
<b>UH10FT</b>	G	Plastic Power Pack SMD	TO-220AC	300	1.2	10	25	

Notes:

(1) **Bold Text** = New Products

"x" designates a number that indicates voltage or is part of a sequence

"y" designates reverse voltage, where:

A=50 V C=150 V F=300 V H=500 V

B=100 V D=200 V G=400 V J=600 V

(2) Glass passivated die

(3) Dual center-tapped device (V<sub>F</sub> limit @ I<sub>F</sub> is per leg)

(4) Source: G = Formerly General Semiconductor<sup>®</sup>

T = Formerly Vishay Telefunken<sup>®</sup> (Telefunken<sup>®</sup> is a registered trademark of Electro Holding GMBH)

→ = Transferred

# Rectifiers Selector Guide



## Ultrafast Recovery Rectifiers

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(4)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>		t <sub>rr</sub> (ns)
			Family	Type		(V)	(A)	
10 (cont'd)	<b>UHB10FT</b>	G	Power Pack SMD	TO-263AB (D <sup>2</sup> PAK)	300	1.2	10	25
	<b>U10DCT</b>	G	Plastic Power Pack <sup>(3)</sup>	TO-220AB	100-200	1.1	10	20
	<b>UB10DCT</b>	G	Power Pack SMD <sup>(3)</sup>	TO-263AB (D <sup>2</sup> PAK)	100-200	1.1	10	20
12	UG12HT - UG12JT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	500 - 600	1.75	12	30
	UGB12HT - UGB12JT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	500 - 600	1.75	12	30
	UGF12HT - UGF12JT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	500 - 600	1.75	12	30
15	UG15JT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AB	500 - 600	1.75	15	35
	UGB15JT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	500 - 600	1.75	15	35
	UGF15JT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AB	500 - 600	1.75	15	35
16	FEP16yT	G	Plastic Power Pack <sup>(2)(3)</sup>	TO-220AB	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
	FEPB16yT	G	Power Pack SMD <sup>(2)(3)</sup>	TO-263AB	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
	FEPF16yT	G	Isolated Power Pack <sup>(2)(3)</sup>	ITO-220AB	50 - 600	0.95 / 1.3 / 1.5	8.0	35 / 50
	FES16yT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	50 - 600	0.975 / 1.3 / 1.5	16	35 / 50
	FESB16yT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 600	0.975 / 1.3 / 1.5	16	35 / 50
	FESF16yT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	50 - 600	0.975 / 1.3 / 1.5	16	35 / 50
	GI2401 - GI2404	G	Plastic Power Pack <sup>(2)(3)</sup>	TO-220AB	50 - 200	0.975	16	35
GIB2401 - GIB2404	G	Power Pack SMD <sup>(2)(3)</sup>	TO-263AB	50 - 200	0.975	16	35	
18	BYV32-xx	G	Plastic Power Pack <sup>(2)(3)</sup>	TO-220AB	50 - 200	1.15	20	25
	BYVB32-xx	G	Power Pack SMD <sup>(2)(3)</sup>	TO-263AB(D <sup>2</sup> PAK)	50 - 200	1.15	20	25
	BYVF32-xx	G	Isolated Power Pack <sup>(2)(3)</sup>	ITO-220AB	50 - 200	1.15	20	25
	UG18yCT	G	Plastic Power Pack <sup>(2)(3)</sup>	TO-220AB	50 - 200	1.1	9.0	20
	UGB18yCT	G	Power Pack SMD <sup>(2)(3)</sup>	TO-263AB(D <sup>2</sup> PAK)	50 - 200	1.1	9.0	20
	UGF18yCT	G	Isolated Power Pack <sup>(2)(3)</sup>	ITO-220AB	50 - 200	1.1	9.0	20
20	<b>UH20FCT</b>	G	Plastic Power Pack <sup>(3)</sup>	TO-220AB	300	1.2	10	25
	<b>UHB20FCT</b>	G	Plastic Power Pack <sup>(3)</sup>	TO-263AB(D <sup>2</sup> PAK)	300	1.2	10	25
30	FEP30yP	G	Plastic Power Pack <sup>(2)(3)</sup>	TO-247AD	50 - 600	0.95 / 1.3 / 1.5	15	35 / 50
	UG30yPT	G	Plastic Power Pack <sup>(2)(3)</sup>	TO-247AD	50 - 200	1.0	15	20

### Notes:

(1) **Bold Text** = New Products

"x" designates a number that indicates voltage or is part of a sequence

"y" designates reverse voltage, where:

A=50 V C=150 V F=300 V H=500 V

B=100 V D=200 V G=400 V J=600 V

(2) Glass passivated die

(3) Dual center-tapped device (V<sub>F</sub> limit @ I<sub>F</sub> is per leg)

(4) Source: G = Formerly General Semiconductor®

T = Formerly Vishay Telefunken® (Telefunken® is a registered trademark of Electro Holding GMBH)

→ = Transferred



**Fast Recovery Rectifiers** are used for applications requiring reverse recovery times in the range of 100 ns to 750 ns. Typical uses are low-frequency SMPS, motor controllers, and electronic ballasts. These products are offered in axial, surface-mount, and power packages.

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(3)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>		t <sub>rr</sub> (ns)
			Family	Type		(V)	(A)	
0.25	BY203	T	Sinterglass Axial	SOD57	1200 - 2000	2.4	0.2	300
0.5	GHR16	G	Plastic Axial	R-1 (Photoflash diode)	1600	1.5	0.5	300
	RGL34y	G	SUPERCTIFIER <sup>®</sup> SMD	DO-213AA (MiniMELF)	50 - 600	1.3	0.5	150 - 250
	RGP02-xxE	G	SUPERCTIFIER <sup>®</sup> Axial	GP10E	1200 - 2000	1.8	0.1	300
0.8	BY268 / 269	T	Sinterglass Axial	SOD57	1400 / 1600	1.25	0.4	400
1.0	1N4933 - 1N4937	G	Plastic Axial	DO-204AL (DO-41)	50 - 600	1.2	1.0	200
	1N4933GP - 1N4937GP	G	SUPERCTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	50 - 600	1.2	1.0	200
	1N4942GP - 1N4948GP	G	SUPERCTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	200 - 1000	1.3	1.0	150 - 500
	1N5615GP - 1N5623GP	G	SUPERCTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	200 - 1000	1.2	1.0	150 - 500
	BA157 - BA159	G	Plastic Axial	DO-204AL (DO-41)	400 - 1000	1.3	1.0	150 - 500
	BA157GP - BA159GP	G	SUPERCTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	400 - 1000	1.3	1.0	150 - 500
	BYD33yGP	G	SUPERCTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	200 - 1000	1.3	1.0	150 - 300
	BYM11-xx	G	SUPERCTIFIER <sup>®</sup> SMD	DO-213AB (MELF)	50 - 1000	1.3	1.0	150 - 500
	GI81x	G	SUPERCTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	50 - 1000	1.2	1.0	750
	RG1y	G → T	Sinterglass Axial	DO-204AP	50 - 1000	1.3	1.0	150 - 500
	RGF1y	G	SUPERCTIFIER <sup>®</sup> SMD	DO-214BA (GF1)	50 - 1000	1.3	1.0	150 - 500
	RGL41y	G	SUPERCTIFIER <sup>®</sup> SMD	DO-213AB (MELF)	50 - 1000	1.3	1.0	150 - 500
	RGP10y	G	SUPERCTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	50 - 1000	1.3	1.0	150 - 500
	RGP10yE	G	SUPERCTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	50 - 1000	1.3	1.0	150 - 500
	RMPG06y	G	Plastic Axial <sup>(2)</sup>	MPG06	50 - 600	1.3	1.0	150 - 200
	RS1y	G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	50 - 800	1.3	1.0	150 - 250
	<b>RS1py</b>	G	Plastic SMD <sup>(2)</sup>	DO-220AA(SMP)	100-600	1.3	1	150 - 250
SRP100y	G	Plastic Axial	DO-204AL (DO-41)	50 - 800	1.3	1.0	100 - 200	
1.25	BYT54	T	Sinterglass Axial	SOD57	50 - 1000	1.5	1.0	100
1.4	BYT52	T	Sinterglass Axial	SOD57	50 - 1000	1.3	1.0	200
1.5	BYG21y	T → G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	800 - 1000	1.5	1.0	120
	BYG24y	T → G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	200 - 600	1.25	1.5	140
	BYV12-16	T	Sinterglass Axial	SOD57	100 - 1000	1.5	1.0	300
	RGP15y	G	SUPERCTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	50 - 1000	1.3	1.5	150 - 500
	RS2y	G	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	50 - 600	1.3	1.5	150 - 500
2.0	BYV37/38	T	Sinterglass Axial	SOD57	800 / 1000	1.1	1.0	300

Notes:

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A=50 V C=150 V F=300 V H=500 V K=800 V

B=100 V D=200 V G=400 V J=600 V M=1000 V

(2) Glass passivated die

(3) Source: G = Formerly General Semiconductor<sup>®</sup>

T = Formerly Vishay Telefunken<sup>®</sup> (Telefunken<sup>®</sup> is a registered trademark of Electro Holding GMBH)

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# Rectifiers Selector Guide



## Fast Recovery Rectifiers

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(3)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>		t <sub>rr</sub> (ns)
			Family	Type		(V)	(A)	
2.0 (cont'd)	BYW32-36	T	Sinterglass Axial	SOD57	200 - 600	1.1	1.0	200
	RG2y	G → T	Sinterglass Axial	DO-204AP	50 - 1000	1.3	2.0	150 - 500
	RGP20y	G	SUPERECTIFIER® Axial	GP20	50 - 600	1.3	2.0	150 - 500
2.5	RGP25y	G	SUPERECTIFIER® Axial	DO-201AD	50 - 1000	1.3	2.5	150 - 500
2.9	BYM36D & E	T	Sinterglass Axial	SOD64	800 - 1000	1.78	3.0	150
3.0	BY39xP	G	Plastic Axial	DO-201AD	100 - 800	1.25	3.0	500
	BYM36A-C	T	Sinterglass Axial	SOD64	200 - 600	1.6	3.0	100
	BYT56	T	Sinterglass Axial	SOD64	50 - 1000	1.4	3.0	100
	BYT77-78	T	Sinterglass Axial	SOD64	800 / 1000	1.1	3.0	300
	BYW72 - BYW76	T	Sinterglass Axial	SOD64	200 - 600	1.1	3.0	200
	GI850 - GI856	G	Plastic Axial	DO-201AD	50 - 600	1.25	3.0	200
	GI910 - GI917	G	Plastic Axial	DO-201AD	50 - 800	1.25	3.0	750
	RG3y	G → T	Sinterglass Axial	G3	50 - 1000	1.3	3.0	150 - 500
	RG4y	G → T	Sinterglass Axial	G4	50 - 600	1.3	3.0	150 - 500
	RGP30y	G	SUPERECTIFIER® Axial	DO-201AD	50 - 1000	1.3	3.0	150 - 500
	RS3y	G	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	50 - 800	1.3	3.0	150 - 500
5.0	SRP300y	G	Plastic Axial	DO-201AD	50 - 800	1.3	3.0	100 - 200
	BY500-xxx	G	Plastic Axial	DO-201AD	100 - 800	1.35	5.0	200
6.0	GI820 - GI828	G	Plastic Axial	P600	50 - 800	1.1	5.0	200
	SRP600	G	Plastic Axial	P600	50 - 800	1.3	6.0	100 - 200
8.0	BY229-xxx	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	200 - 800	1.85	20	145
	BY229X-xxx	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	200 - 800	1.85	20	145
	BY229B-xxx	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	200 - 800	1.85	20	145
10	BYS459 - 1500	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	1500	1.3	6.5	350
	BYS459B - 1500	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	1500	1.3	6.5	350
	BYS459F - 1500	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	1500	1.3	6.5	350
	BYS459-1500S	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	1500	1.35	6.5	220
	BYS459B-1500S	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	1500	1.35	6.5	220
	BYS459F-1500S	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	1500	1.35	6.5	220
	DTV32	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	1500	1.5	6.0	175
	DTV32B	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	1500	1.5	6.0	175
	DTV32F	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	1500	1.5	6.0	175
	DTV56	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	1500	1.8	6.0	135
	DTV56B	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	1500	1.8	6.0	135
DTV56F	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	1500	1.8	6.0	135	

Notes:

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"y" designates reverse voltage, where:

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B=100 V D=200 V G=400 V J=600 V M=1000 V

(2) Glass passivated die

(3) Source: G = Formerly General Semiconductor®

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**Standard Rectifiers** are for low-frequency general purpose use in consumer applications. Typical reverse recovery times are approximately 2  $\mu$ s. These products are offered with forward current ratings of 0.25 A to 8 A and reverse voltages as high as 4000 V. They are available in plastic, glass, and Superectifier<sup>®</sup> constructions.

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(3)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>	
			Family	Type		(V)	(A)
0.25	GI250-x	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	1000 - 4000	3.5	0.25
	GP02-xx	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	2000 - 4000	3.0	0.25
0.35	BYT62	T	Sinterglass Axial	SOD57	2400	3.0	0.2
0.5	GL34y	G	SUPERECTIFIER <sup>®</sup> SMD	DO-213AA (MiniMELF)	50 - 1000	1.2 / 1.3	0.5
0.7	S07B - S07M	G → T	Plastic SMD	DO-219 (SMF)	100 - 1000	1.1	1.0
0.8	GP08y	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AL	50 - 600	1.3	0.8
1.0	1N361xGP & 1N3957GP	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	200 - 100	1.0	1.0
	1N4001-1N4007	G	Plastic Axial	DO-204AL (DO-41)	50 - 1000	1.1	1.0
	1N4001GP-1N4007GP	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	50 - 1000	1.1	1.0
	1N4245GP-1N4249GP	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	200 - 1000	1.2	1.0
	1N4383GP-1N4385GP	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	200 - 600	1.0	1.0
	1N4585GP & 1N4586GP	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	800 - 1000	1.0	1.0
	1N5059-1N5062	G → T	Sinterglass Axial	DO-204AP	200 - 800	1.2	1.0
	1N5059GP-1N5062GP	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	200 - 800	1.2	1.0
	1N5614GP-1N5622GP	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	200 - 1000	1.2	1.0
	1N6478-1N6484	G	SUPERECTIFIER <sup>®</sup> SMD	DO-213AB (MELF)	50 - 1000	1.1	1.0
	BYD13yGP	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	200 - 1000	1.3	1.0
	BYM10-xxx	G	SUPERECTIFIER <sup>®</sup> SMD	DO-213AB (MELF)	50 - 1000	1.1 / 1.2	1.0
	GF1y	G	SUPERECTIFIER <sup>®</sup> SMD	DO-214BA (GF1)	50 - 1000	1.1 / 1.2	1.0
	GI1-xxxGP	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	1200 - 1600	1.1	1.0
	G1y	G → T	Sinterglass Axial	DO-204AP	50 - 1000	1.1 / 1.2	1.0
	GL41y	G	SUPERECTIFIER <sup>®</sup> SMD	DO-213AB (MELF)	50 - 1600	1.1 / 1.2	1.0
	GP10y	G	SUPERECTIFIER <sup>®</sup> Axial	DO-204AL (DO-41)	50 - 1600	1.1 / 1.2 / 1.3	1.0
	GP10yE	G	SUPERECTIFIER <sup>®</sup> Axial	GP10E	50 - 1000	1.3	1.0
	GPP10y	G	Plastic Axial <sup>(2)</sup>	DO-204AL (DO-41)	50 - 1000	1.1	1.0
M100y	G	Plastic Axial	DO-204AL (DO-41)	50 - 1000	1.0 / 1.1	1.0	
MPG06y	G	Plastic Axial <sup>(2)</sup>	MPG06	50 - 1000	1.1	1.0	

Notes:

(1) **Bold Text**= New Products

"x" designates a number that indicates voltage or is part of a sequence

"y" designates reverse voltage, where:

A=50 V C=150 V F=300 V H=500 V K=800 V

B=100 V D=200 V G=400 V J=600 V M=1000 V

(2) Glass passivated die

(3) Source: G = Formerly General Semiconductor<sup>®</sup>

T = Formerly Vishay Telefunken<sup>®</sup> (Telefunken<sup>®</sup> is a registered trademark of Electro Holding GMBH)

→ = Transferred

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(3)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>	
			Family	Type		(V)	(A)
1.0 (cont'd)	S1y	G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	50 - 1000	1.1	1.0
	<b>S1ya</b>	G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	100-1000	1.1	1.0
	S1Py	G	Plastic SMD <sup>(2)</sup>	DO-220AA (SMP)	50 - 600	1.1	1.0
	S330D	T	Sinterglass Axial	SOD57	1000	1.0	1.0
1.5	1N5391-1N5399	G	Plastic Axial	DO-204AC (DO-15)	50 - 1000	1.4	1.5
	1N5391GP-1N5399GP	G	SUPERRECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	50 - 1000	1.4	1.5
	AGP15-xxx	G	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	400 - 800	1.1	1.5
	BY448GP	G	SUPERRECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	1650	1.6	3.0
	BYG10y	T → G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	200 - 1000	1.1	1.0
	BYT51y	T	Sinterglass Axial	SOD57	50 - 1000	1.1	1.0
	CGP15	G	SUPERRECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	1400	1.1	1.0
	DGP15	G	SUPERRECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	1500	1.1	1.0
	GP15y	G	SUPERRECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	50 - 1000	1.1	1.5
	GPP15y	G	Plastic Axial	DO-204AC (DO-15)	50 - 1000	1.1	1.5
	S2y	G	Plastic SMD <sup>(2)</sup>	DO-214AA (SMB)	50 - 1000	1.15	1.5
2.0	<b>SA2y</b>	G	Plastic SMD <sup>(2)</sup>	DO-214AC (SMA)	100 - 1000	1.1	2.0
	BY448 & BY458	T	Sinterglass Axial	SOD57	1500 / 1200	1.6	3.0
	BY527	T	Sinterglass Axial	SOD57	800	1.0	1.0
	BYW52 - BYW56	T	Sinterglass Axial	SOD57	200 - 1000	1.0	1.0
	BYX82 - BYX86	T	Sinterglass Axial	SOD57	200 - 1000	1.0	1.0
	CGP20	G	SUPERRECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	1400	1.1	2.0
	DGP20	G	SUPERRECTIFIER <sup>®</sup> Axial	DO-204AC (DO-15)	1500	1.1	2.0
	G2y	G → T	Sinterglass Axial	DO-204AP	50 - 1000	1.1 / 1.2	2.0
	GP20y	G	SUPERRECTIFIER <sup>®</sup> Axial	GP20	50 - 600	1.1 / 1.2	2.0
GPP20y	G	Plastic Axial <sup>(2)</sup>	DO-204AC (DO-15)	50 - 1000	1.1	2.0	
2.5	BY228GP	G	SUPERRECTIFIER <sup>®</sup> Axial	DO-201AD	1500	1.6	2.5

Notes:

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"y" designates reverse voltage, where:

A=50 V C=150 V F=300 V H=500 V K=800 V

B=100 V D=200 V G=400 V J=600 V M=1000 V

(2) Glass passivated die

(3) Source: G = Formerly General Semiconductor<sup>®</sup>

T = Formerly Vishay Telefunken<sup>®</sup> (Telefunken<sup>®</sup> is a registered trademark of Electro Holding GMBH)

→ = Transferred



I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(3)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> @ I <sub>F</sub>	
			Family	Type		(V)	(A)
3.0	1N5400 - 1N5408	G	Plastic Axial	DO-201AD	50 - 1000	1.2	3.0
	1N5550 - 1N5552	G → T	Sinterglass Axial	G4	200 - 600	1.2	9.0
	1N5624 - 1N5627	G → T	Sinterglass Axial	G3	200 - 800	1.0	3.0
	1N5624GP - 1N5627GP	G	SUPERECTIFIER <sup>®</sup> Axial	DO-201AD	200 - 800	1.0	3.0
	BY251GP - BY255GP	G	Plastic Axial <sup>(2)</sup>	DO-201AD	200 - 1300	1.1	3.0
	BY251P - BY255P	G	Plastic Axial <sup>(2)</sup>	DO-201AD	200 - 1300	1.1	3.0
	BY251P	G	Plastic Axial <sup>(2)</sup>	DO-201AD	200 - 1300	1.1	3.0
	BY228	T	Sinterglass Axial	SOD64	1500	1.5	5.0
	BY228/13, BY228/15	T	Sinterglass Axial	SOD64	1000 - 1200	1.5	5.0
	BYW82 - BYW86	T	Sinterglass Axial	SOD64	200 - 1000	1.0	3.0
	CGP30	G	SUPERECTIFIER <sup>®</sup> Axial	DO-201AD	1400	1.2	3.0
	DGP30	G	SUPERECTIFIER <sup>®</sup> Axial	DO-201AD	1500	1.2	3.0
	GP30y	G	SUPERECTIFIER <sup>®</sup> Axial	DO-201AD	50 - 1000	1.1 / 1.2	3.0
	G3y	G → T	Sinterglass Axial	G3	50 - 1000	1.1 / 1.2	3.0
	G4y	G → T	Sinterglass Axial	G4	50 - 600	1.1	3.0
	GI500-GI510	G	Plastic Axial	DO-201AD	50 - 1000	1.1	9.4
	P300y	G	Plastic Axial	DO-201AD	50 - 1000	1.2	3.0
	S3y	G	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	50 - 1000	1.15	2.5
5.0	S5y	G	Plastic SMD <sup>(2)</sup>	DO-214AB (SMC)	50 - 1000	1.15	5.0
6	GI750-GI758	G	Plastic Axial	P600	50 - 800	0.9 / 0.95	6.0
	GPP60y	G	Plastic Axial	P600	50 - 400	1.1	6.0
	P600y	G	Plastic Axial	P600	50 - 1000	0.9 / 1.0	6.0
8.0	NS8yT	G	Plastic Power Pack <sup>(2)</sup>	TO-220AC	50 - 1000	1.1	8.0
	NSB8yT	G	Power Pack SMD <sup>(2)</sup>	TO-263AB (D <sup>2</sup> PAK)	50 - 1000	1.1	8.0
	NSF8yT	G	Isolated Power Pack <sup>(2)</sup>	ITO-220AC	50 - 1000	1.1	8.0

Notes:

(1) **Bold Text**= New Products

"x" designates a number that indicates voltage or is part of a sequence

"y" designates reverse voltage, where:

A=50 V C=150 V F=300 V H=500 V K=800 V

B=100 V D=200 V G=400 V J=600 V M=1000 V

(2) Glass passivated die

(3) Source: G = Formerly General Semiconductor<sup>®</sup>

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→ = Transferred

**Bridge Rectifiers** are essential for any electronic equipment which requires full wave rectification of an AC power source. The bridge rectifier is comprised of four separate rectifier components configured into a “bridge” arrangement in a single package. Vishay manufactures a complete line of bridge rectifiers including fast recovery, surface-mount, and single in-line types.

I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(7)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> <sup>(5)</sup> @ I <sub>F</sub>	
			Family	Type		(V)	(A)
0.5	MBxM	G	Mini-bridge	MBM	200 - 600	1.0	0.4
	BxM	G	Mini-bridge	MBM	200 - 600	1.0	0.5
	MBxS	G	Mini-bridge (SMD)	MBS (TO-269AA)	200 - 600	1.0	0.4
	BxS	G	Mini-bridge (SMD)	MBS (TO-269AA)	200 - 600	1.0	0.5
	RMBxS	G	Recovery mini-bridge (SMD)	MBS (TO-269AA)	200 - 400	1.25	0.4
0.9	BxxC800DM	G	Dual in-line	DFM	65 - 600	1.0	0.9
	BxxC800G	G	WOG	WG	65 - 600	1.0	0.9
1.0	BxxC1000G	G	WOG	WG	65 - 600	1.0	1.0
	DFxxM	G	Dual in-line	DFM	50 - 1000	1.1	1.0
	DFxxMA	G	Dual in-line	DFM	50 - 1000	1.1	1.0
	DFxxS	G	Dual in-line (SMD)	DFS	50 - 1000	1.1	1.0
	DFxxSA	G	Dual in-line (SMD)	DFS	50 - 1000	1.1	1.0
	EDF1yM	G	Ultrafast dual in-line <sup>(3)</sup>	DFM	50 - 200	1.05	1.0
	EDF1yS	G	Ultrafast dual in-line (SMD) <sup>(3)</sup>	DFS	50 - 200	1.05	1.0
1.5	3N24x	G	Single in-line	KBPM	50 - 1000	1.0 / 1.3	1.0 / 1.57
	BxxC1500G	G	WOG	WG	65 - 600	1.0	1.5
	DF15xxS	G	Dual in-line (SMD)	DFS	50 - 1000	1.1	1.5
	DFL15xxS	G	Low-profile DIL (SMD)	L-DFS	50 - 1400	1.1	1.5
	G2SBxx	G	Single in-line <sup>(4)</sup>	GBL	200 - 800	1.05	0.75
	G2SBAxx	G	Single in-line <sup>(4)</sup>	GBL	200 - 800	1.05	0.75
	KBPxxM	G	Single in-line	KBPM	50 - 1000	1.0 / 1.3	1.0 / 1.57
2.0	WxxG	G	WOG	WG	50 - 1000	1.0	1.0
	2KBPxxM	G	Single in-line	KBPM	50 - 1000	1.1	3.14
	2WxxG	G	WOG	WG	50 - 1000	1.1	2.0
3.0	3N25x	G	Single in-line	KBPM	50 - 1000	1.1	3.14
	GBPC1xx	G	GBPC with wire leads	GBPC1	50 - 1000	1.0	1.5
	4.0	G3SBAxx	G	Single in-line with mounting hole <sup>(4)</sup>	GBU	200 - 600	1.0
GBLxx		G	Single in-line	GBL	50 - 1000	1.1	4.0
GBLAxx		G	Single in-line	GBL	50 - 1000	1.1	4.0
GBU4y		G	Single in-line with mounting hole	GBU	50 - 1000	1.0	4.0
GSIB4xx		G	Single in-line with mounting hole	GSIB-3G	200 - 800	0.95	2.0
GSIB4Axx		G	Single in-line with mounting hole	GSIB-3G	200 - 800	1.0	2.0
KBLxx		G	Single in-line*	KBL	50 - 1000	1.1	4.0
KBU4y		G	Single in-line with mounting hole*	KBU	50 - 1000	1.0	4.0

Notes:

(1) **Bold Text** = New Products

(2) All bridges use glass passivated chips, unless designated with\*

(3) t<sub>r</sub> = 50 ns max. for EDF1 types

(4) Japanese electrical specifications

(5) V<sub>F</sub> limits are per leg

(6) Bridges are UL listed under Recognized Component Index, file number E54214

(7) Source: G = Formerly General Semiconductor®

T = Formerly Vishay Telefunken® (Telefunken® is a registered trademark of Electro Holding GMBH)

→ = Transferred



I <sub>F(AV)</sub> (A)	Device <sup>(1)</sup>	Source <sup>(7)</sup>	Package		V <sub>(BR)</sub> Range (V)	Max V <sub>F</sub> <sup>(5)</sup> @ I <sub>F</sub>	
			Family	Type		(V)	(A)
6.0	GBPC6xx	G	GBPC with wire leads	GBPC6	50 - 1000	1.0	3.0
	GBU6y	G	Single in-line with mounting hole	GBU	50 - 1000	1.0	6.0
	G5SBAxx	G	Single in-line with mounting hole <sup>(4)</sup>	GBU	200 - 600	1.05	3.0
	GSIB6xx	G	Single in-line with mounting hole	GSIB-5S	200 - 800	0.95	3.0
	GSIB6Axx	G	Single in-line with mounting hole	GSIB-5S	200 - 800	1.0	3.0
	KBU6y	G	Single in-line with mounting hole*	KBU	50 - 1000	1.0	6.0
8.0	GBU8y	G	Single in-line with mounting hole	GBU	50 - 1000	1.0	8.0
	KBU8y	G	Single in-line with mounting hole*	KBU	50 - 1000	1.0	8.0
10	VSIB10Axx	G	Single in-line with mounting hole	GSIB-5S	200 - 800	1.0	5.0
12	GBPC12xx	G	GBPC with fast-on lugs	GBPC12-35	50 - 1000	1.1	6.0
	GBPC12xxW	G	GBPC with wire leads	GBPC12-35W	50 - 1000	1.1	6.0
15	GBPC15xx	G	GBPC with fast-on lugs	GBPC12-35	50 - 1000	1.1	7.5
	GBPC15xxW	G	GBPC with wire leads	GBPC12-35W	50 - 1000	1.1	7.5
	GSIB15xx	G	Single in-line with mounting hole <sup>(4)</sup>	GSIB-5S	200 - 800	0.95	7.5
	GSIB15Axx	G	Single in-line with mounting hole <sup>(4)</sup>	GSIB-5S	200 - 800	1.05	7.5
	VSIB15xx	G	Single in-line with mounting hole <sup>(4)</sup>	GSIB-5S	200 - 800	0.95	7.5
	VSIB15Axx	G	Single in-line with mounting hole <sup>(4)</sup>	GSIB-5S	200 - 800	1.0	7.5
20	GSIB20xx	G	Single-in-line	GSIB-5S	200 - 800	1.1	10
	VSIB20xx	G	Single in-line with mounting hole <sup>(4)</sup>	GSIB-5S	200 - 800	1.0	10
25	GBPC25xx	G	GBPC with fast-on lugs	GBPC12-35	50 - 1000	1.1	12.5
	GBPC25xxW	G	GBPC with wire leads	GBPC12-35W	50 - 1000	1.1	12.5
	GSIB25xx	G	Single-in-line	GSIB-5S	200 - 800	1.05	12.5
	VSIB25xx	G	Single in-line with mounting hole <sup>(4)</sup>	GSIB-5S	200 - 800	1.0	12.5
35	GBPC35xx	G	GBPC with fast-on lugs	GBPC12-35	50 - 1000	1.1	17.5
	GBPC35xxW	G	GBPC with wire leads	GBPC12-35W	50 - 1000	1.1	17.5

Notes:

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- (4) Japanese electrical specifications
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- (6) Bridges are UL listed under Recognized Component Index, file number E54214
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→ = Transferred

# Rectifiers Selector Guide



## Rectifier Packages



SMPC  
(TO-277A)



SMP  
(DO-220AA)



GF1  
(DO-214BA)



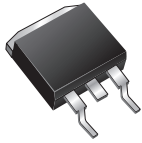
SMA  
(DO-214AC)



SMB  
(DO-214AA)



SMC  
(DO-214AB)



D<sup>2</sup>PAK  
(TO-263AB)



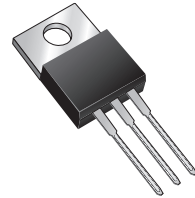
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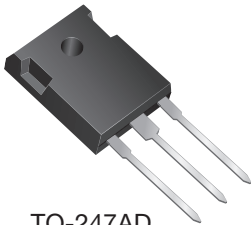
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ITO-220AB



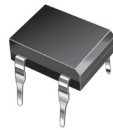
TO-220AB



TO-247AD



MBS  
(TO-269AA)



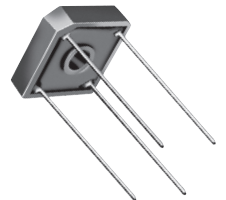
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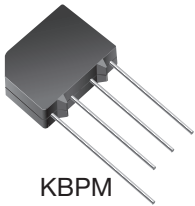
DFS



DFLS



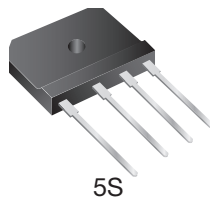
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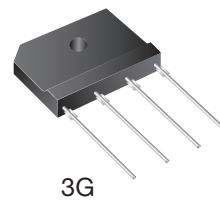
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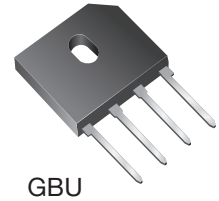
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5S



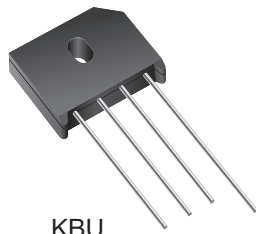
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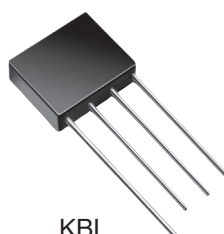
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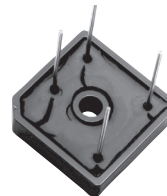
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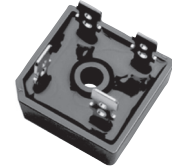
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KBL



GBPC - W



GBPC



P600



DO-204AC



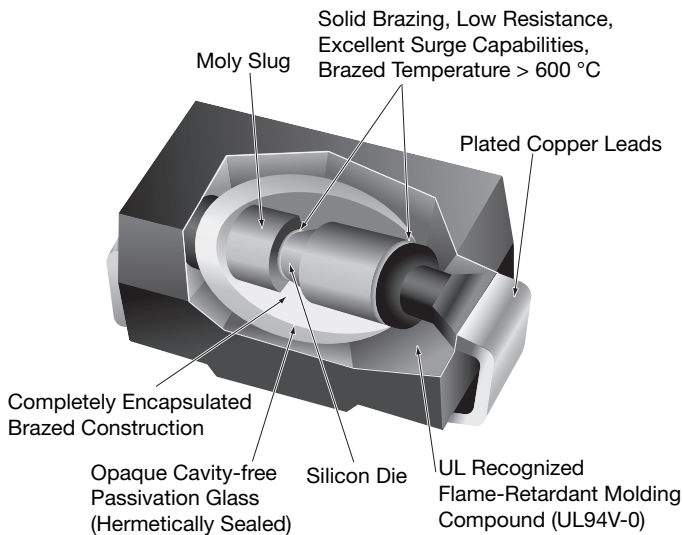
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MPG06

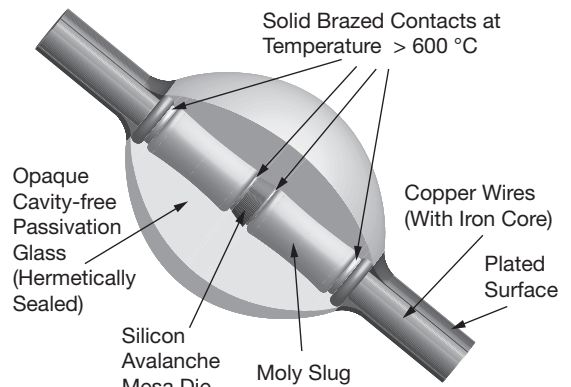
### SUPERRECTIFIER®

The SUPERRECTIFIER is exactly that: a super rectifier. This highly-reliable and cost-effective rectifier is the result of a combination of patented technologies. No other 0.25-A to 3.0-A rectifiers of any kind — plastic, glass, or metal — can match the SUPERRECTIFIER combination of features that result from Vishay's unique glass-plastic construction. SUPERRECTIFIER products are offered in standard, fast, and ultrafast types for both axial and surface mounting.



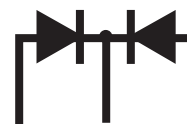
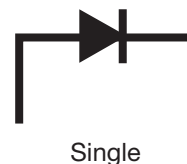
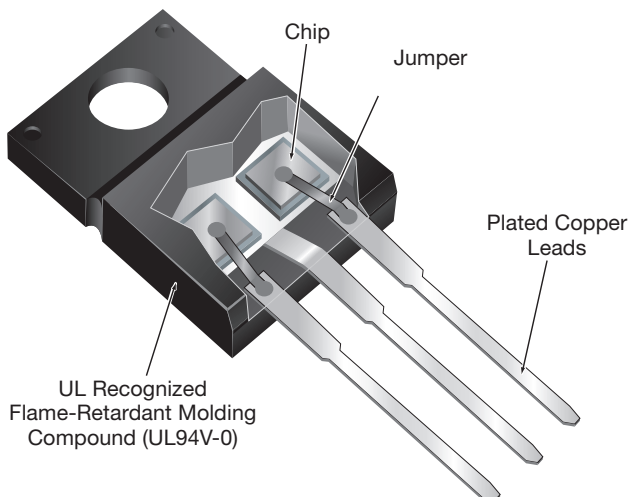
### SINTERGLASS RECTIFIER

The glass passivated rectifier is a hermetically-sealed, diffused junction rectifier with unsurpassed operating and surge capabilities at high temperatures. An extremely pure, specially developed glass applied in direct contact with the silicon junction, creates an ideal cavity-free passivating medium. Glass rectifiers are offered in standard, fast, and ultrafast types.



### ITO-220AB

Vishay offers the TO-220 power package with either the heat sink exposed or with an isolated body, as shown below.





## Notes





**Notes**



## Notes



#### SEMICONDUCTORS:

Rectifiers • High-Power Diodes\* and Thyristors\* • Small-Signal Diodes • Zener and Suppressor Diodes • FETs • RF Transistors • Optoelectronics • ICs • Modules and Assemblies\*

#### PASSIVE COMPONENTS:

Resistive Products • Magnetics • Capacitors • Strain Gage Transducers and Stress Analysis Systems

\*Closing of the planned acquisition of the power control systems business of International Rectifier is expected to occur before the end of March 2007, subject to customary closing conditions.



## One of the World's Largest Manufacturers of Discrete Semiconductors and Passive Components

WORLDWIDE SALES CONTACTS

### THE AMERICAS

#### UNITED STATES

VISHAY AMERICAS  
ONE GREENWICH PLACE  
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