#### FEATURES AND SPECIFICATIONS



Molex has expanded the miniDIMM socket family with the Reverse Right Angle, Right Angle and 22.5° Reverse Angle version to be used in wider variety of applications.

The miniDIMM memory sockets was designed to accept DDR-2 miniDIMM memory modules (MO-244 -244 pin & MO-258 - 200 pin). Engineered in surface mount technology with a small form factor helps where space constraint is a concern and demand for high memory density is critical. miniDIMM is especially useful in applications where multiple memory modules are required.

Typical applications include 1U and 2U servers, blade servers, high-end computers, telecom switches and routers, networking, RAID storage and PCI/PCIe cards. Having a relatively small pitch size of 0.60 mm, miniDIMM offers up to 40% savings on PCB real estate compared to the prevailing 1.0 mm pitch DDR2 DIMM sockets.

The robust latches and latch towers at both ends of the miniDIMM offer locking and vibration dampening to ensure memory modules sit securely in the connectors during shock and vibration tests.

Molex is an active member of the JEDEC work group which defines standards for the memory industry. To assure compliance with the industry requirements, the miniDIMM family conforms to JEDEC memory socket specifications, is offered in Lead Free plating, and is RoHS compliant.

# 0.6mm (.236") Pitch DDR2 miniDIMM Socket 200/244 Circuits

**78001** – Reverse Right Angle, SMT

**87782** – Vertical, SMT

87783 - 22.5° Angle, SMT

87918 – Right Angle, SMT

78035 - 22.5° Reverse Angle, SMT



# Features and Benefits

- Small pitch of 0.6mm permits maximum utilization of space available on the PCB
- Small form factor allows DIMM to fit into slim enclosures
- Surface Mount Technology for easy processing and ability to utilize both sides of PCB
- Solder Tabs at both ends and center of housing provide additional mechanical strength after soldering
- Robust dual latches provide excellent module retention and easy ejection of module
- Accepts JEDEC MO-244 and MO-258 that ensures 100% industry compatibility
- Polarization Keys assure correct module orientation
- All connectors are pick and place process capable

### **SPECIFICATIONS**

# Reference Information

Packaging: Tray

UL File No.: E29179 (78001, 87782, 87783, 87918); TBA (78035) CSA File No.: LR19980 (78001, 87782, 87783, 87918); TBA (78035)

Mates With: JEDEC MO-258 (200 Circuits)
JEDEC MO-244 (244 Circuits)

#### Electrical

Voltage: 30V RMS at 60 Hz

**Current: 1.0A at 30°C Temperature Rise** 

Contact Resistance:
30 milliohms max. (87782)
40 milliohms max. (87783, 78035)
50 milliohms max. (78001, 87918)
Dielectric Withstanding Voltage: 500V AC
Insulation Resistance: 1000 Megohms min.

# Mechanical

Contact Retention to Housing: 3N min.

Mating Force : 195N (200 Circuits); 238N (244 Circuits)

Latch Actuation Force: 45N max. per latch

**Durability: 25 cycles** 

# **Physical**

Housing:

Black High Temperature, Liquid Crystal Polymer (LCP), UL

94V-0

**Contact: Copper Alloy** 

Plating:

Contact Area — 0.76µm (30µ") Gold (Au) Solder Tail Area — Tin (Sn), Lead-free

Underplating — Nickel

Operating Temperature: - 10 °C to +85 °C

# **APPLICATIONS**

- Servers and HDD
  - 1U and 2U Servers
  - Blade Servers
  - High-end Computers
- **■** Telecommunication
  - Switches and Routers
  - Networking

Storage



Vertical 22

Right Angle

Industrial

Computer



0.6mm (.236") Pitch
DDR2 miniDIMM Socket
200/244 Circuits

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# **ORDERING INFORMATION**

Description	Lead-Free Part Number	Circuit Size	Voltage Key	Latch Color
Reverse Right Angle Surface Mount	78001-1244	244	1.8V	Off-White
	78001-2244		2.5V	
	78001-1200	200	1.8V	
	78001-2200		2.5V	
Right Angle Surface Mount	87918-0001	244	1.8V	
	87918-0002		2.5V	
	87918-0201	200	1.8V	
	87918-0202		2.5V	
Vertical Surface Mount	87782-2003	244	1.8V	
	87782-2002		2.5V	
	<i>87782-2001</i>		1.8V	
	87782-2201	200	1.8V	
	87782-2202		2.5V	
22.5° Reverse Angle Surface Mount	<i>7</i> 8035-0001	244	1.8V	
	78035-0002		2.5V	
	78035-0201	200	1.8V	
	78035-0202		2.5V	
22.5° Angle Surface Mount	<i>87783-0001</i>	244	1.8V	
	<i>87783-0002</i>		2.5V	
	87783-0201	200	1.8V	
	87783-0202		2.5V	



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