

MITSUBISHI ELECTRIC CORPORATION

APPLICATION NOTE	Prepared by	S.Uchida	Rev	A	<i>M. Kuriwa</i>
	Approved by	M.Yamamoto Nov.1'02			<i>M. Tabata 14-Jan-'03</i>

CMH5107A.doc

Subject Performance Curves of CM400DY-24NF

Contents

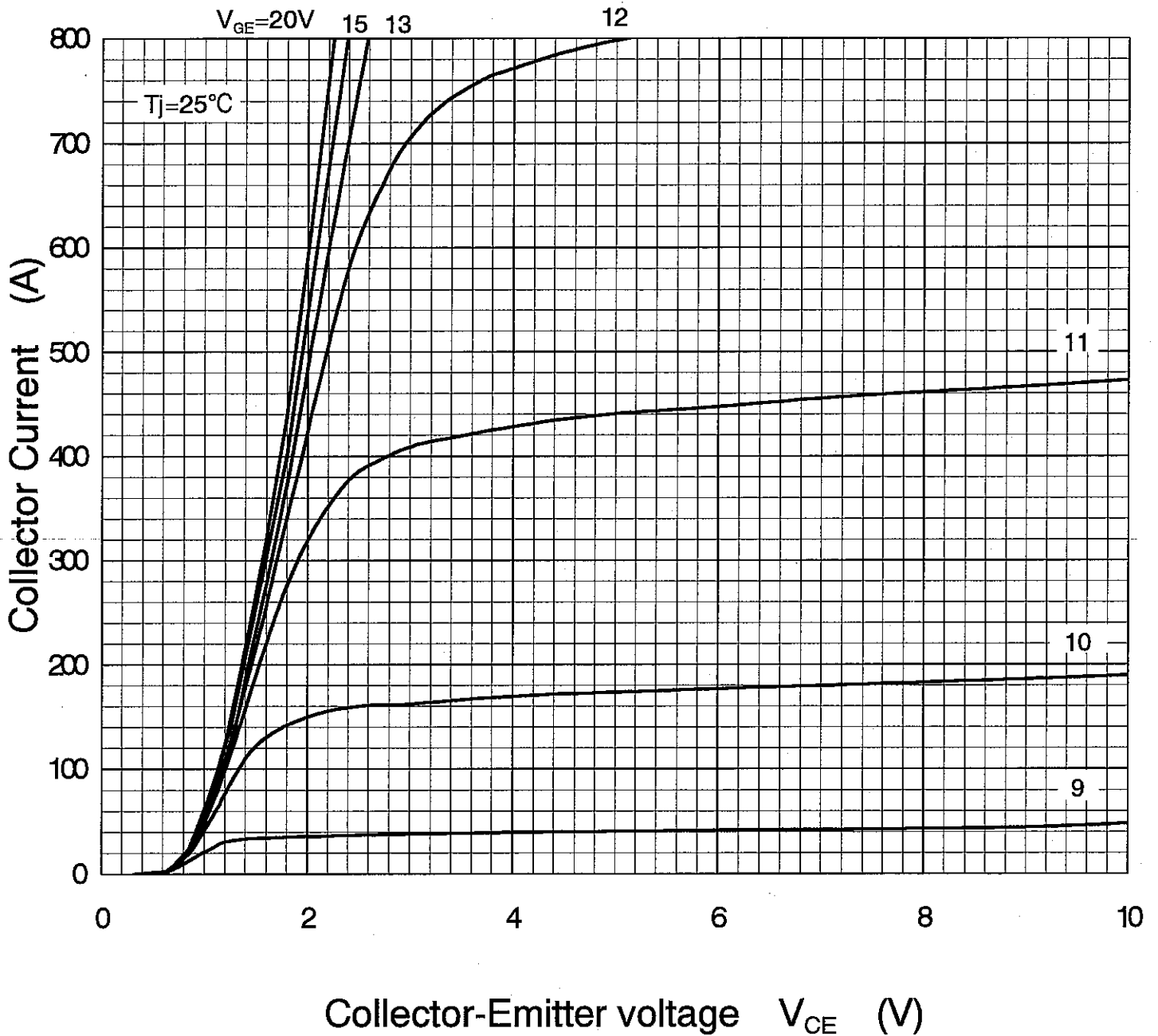
- Output Characteristics(typical)
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- Collector-Emitter Saturation Voltage Characteristics(typical)
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Don't measure these static characteristics yourself by curve tracer.
 Usually, curve tracer has too much wiring inductance and device will be damaged by over voltage from oscillation.

IGBT Module	CMH-5107-A	APPLICATION NOTE
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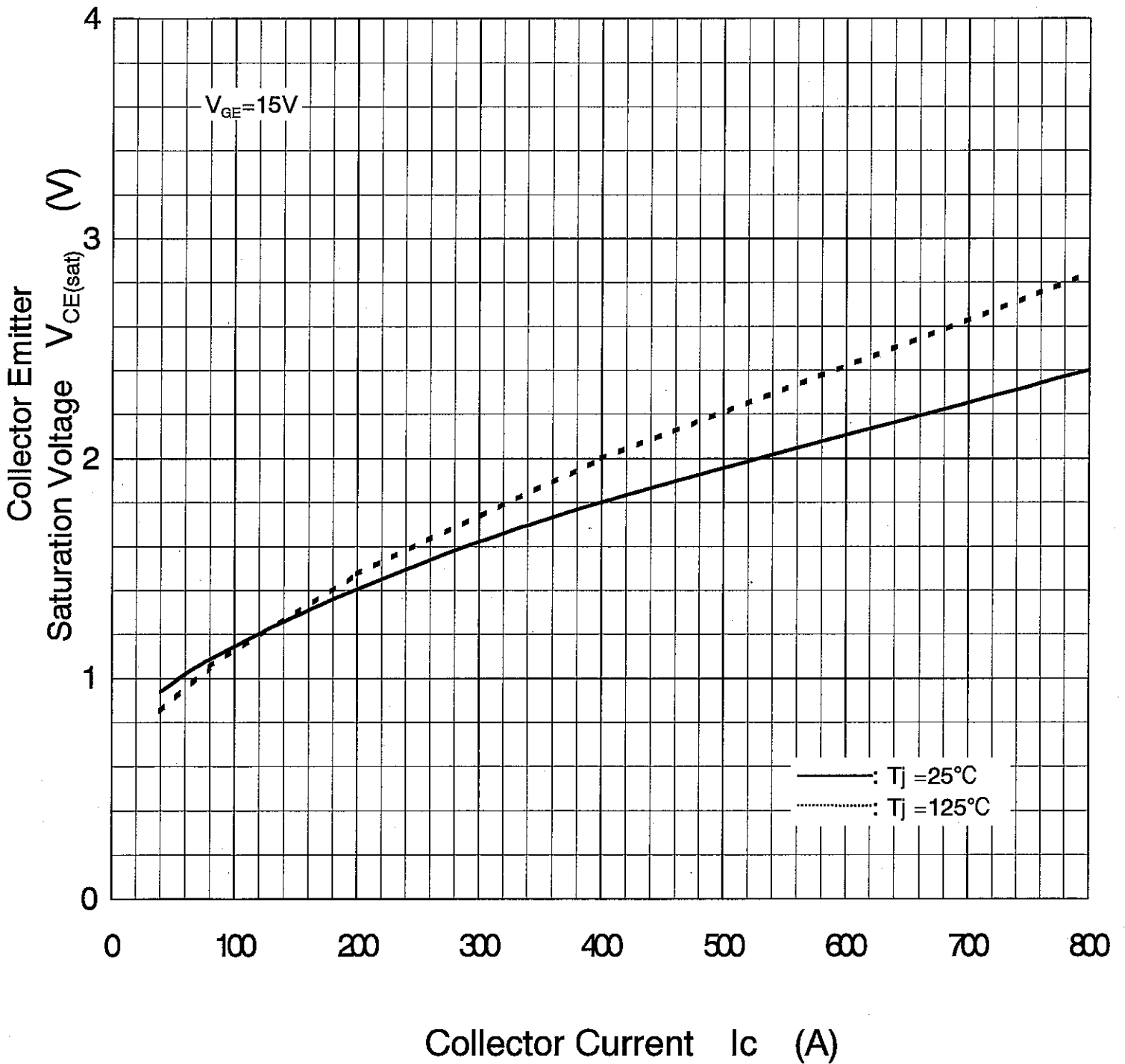
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Output Characteristics (Typical) CM400DY-24NF



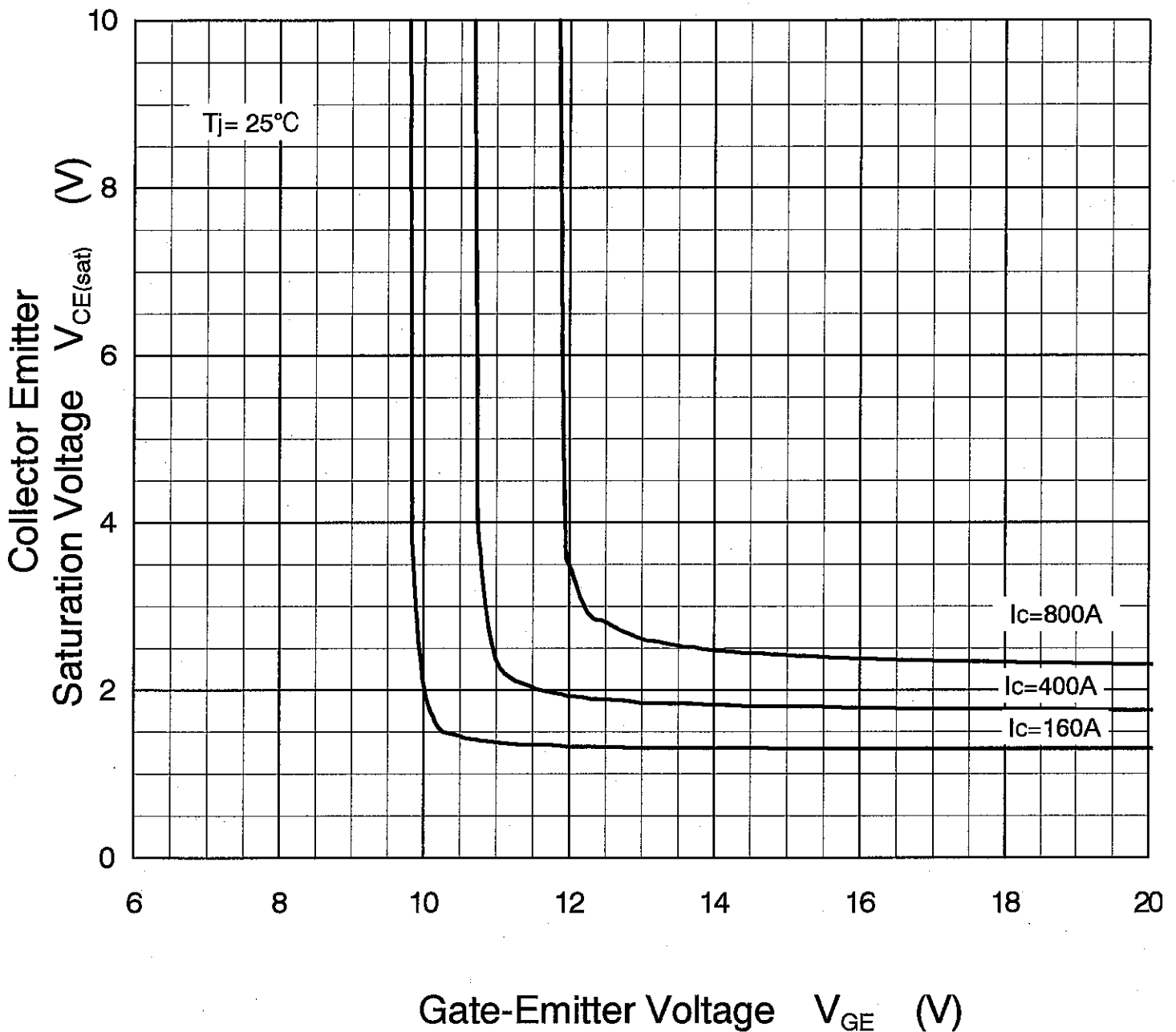
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Collector-Emitter Saturation Voltage Characteristics (Typical) CM400DY-24NF



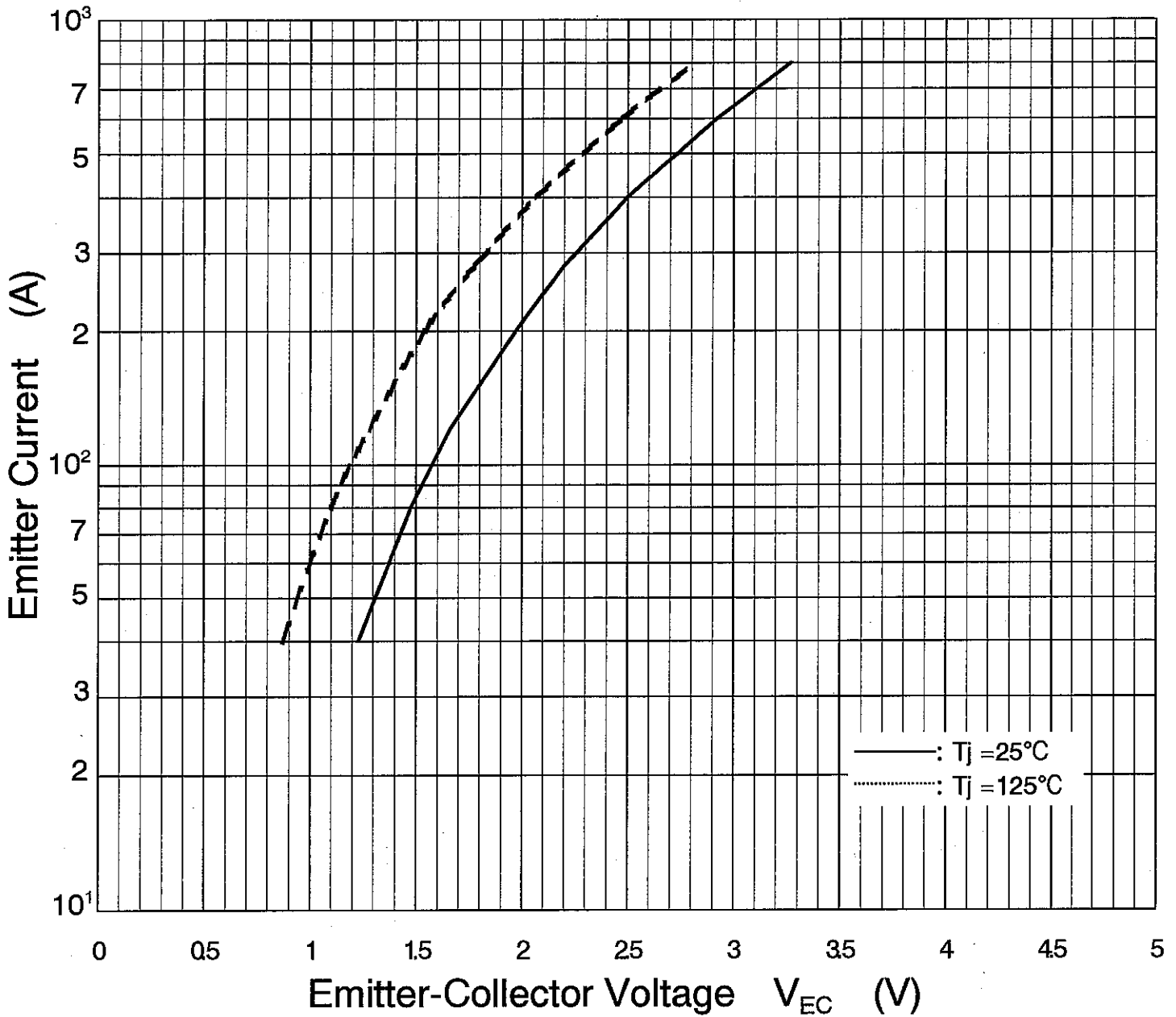
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Collector-Emitter Saturation Voltage Characteristics (Typical) CM400DY-24NF



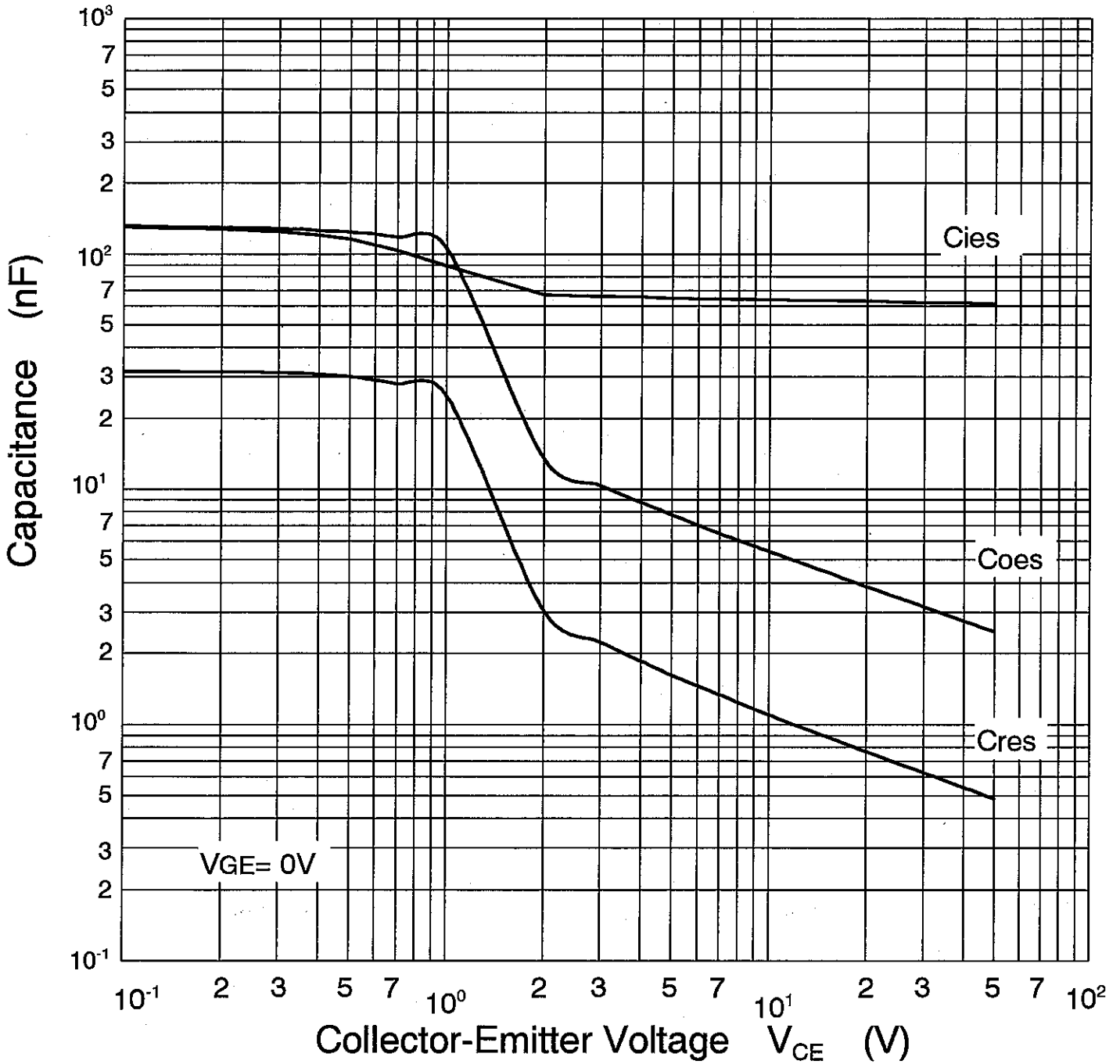
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Free-Wheel Diode Forward Characteristics (typical) CM400DY-24NF



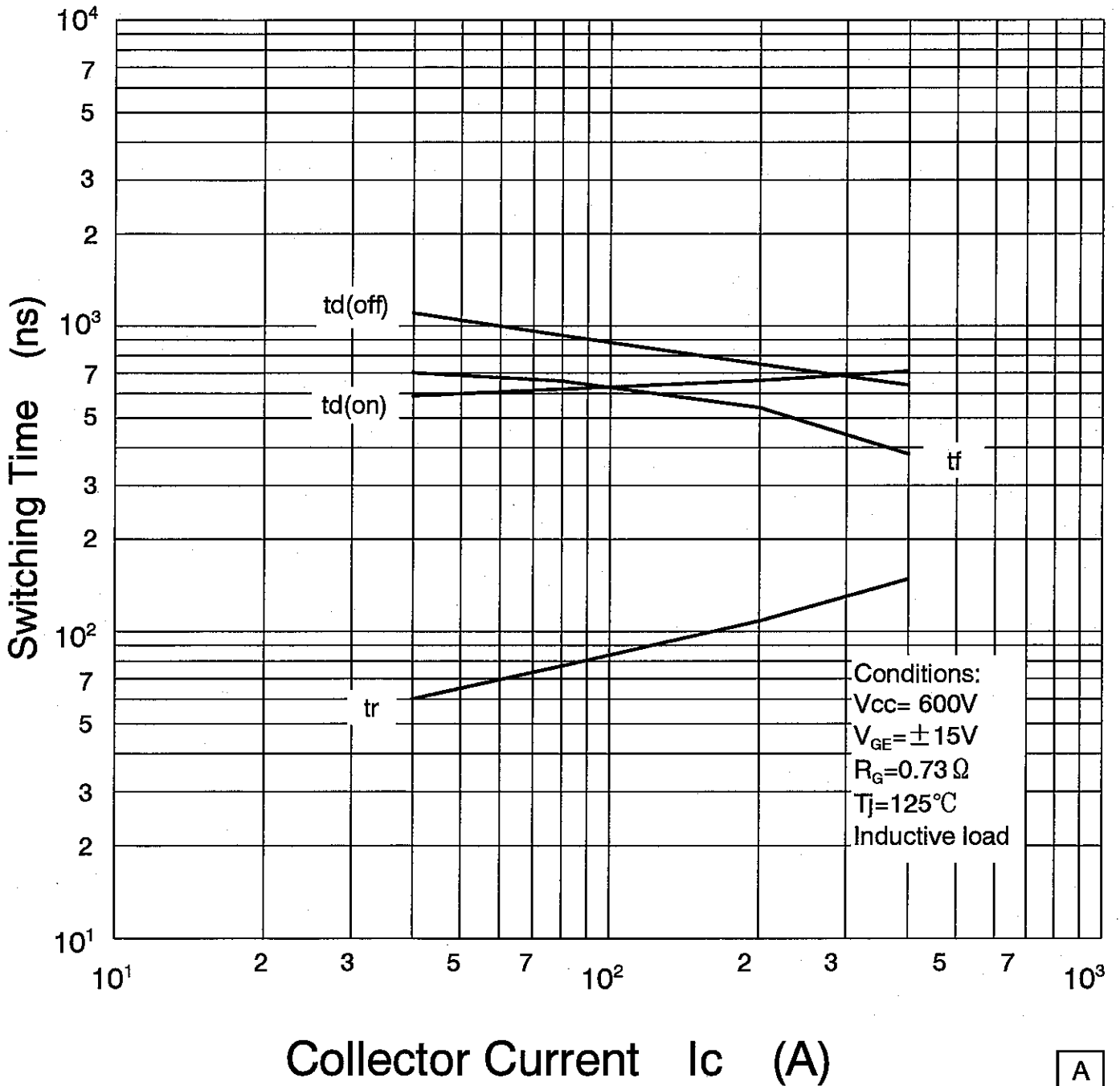
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Capacitance- V_{CE} Characteristics (typical) CM400DY-24NF



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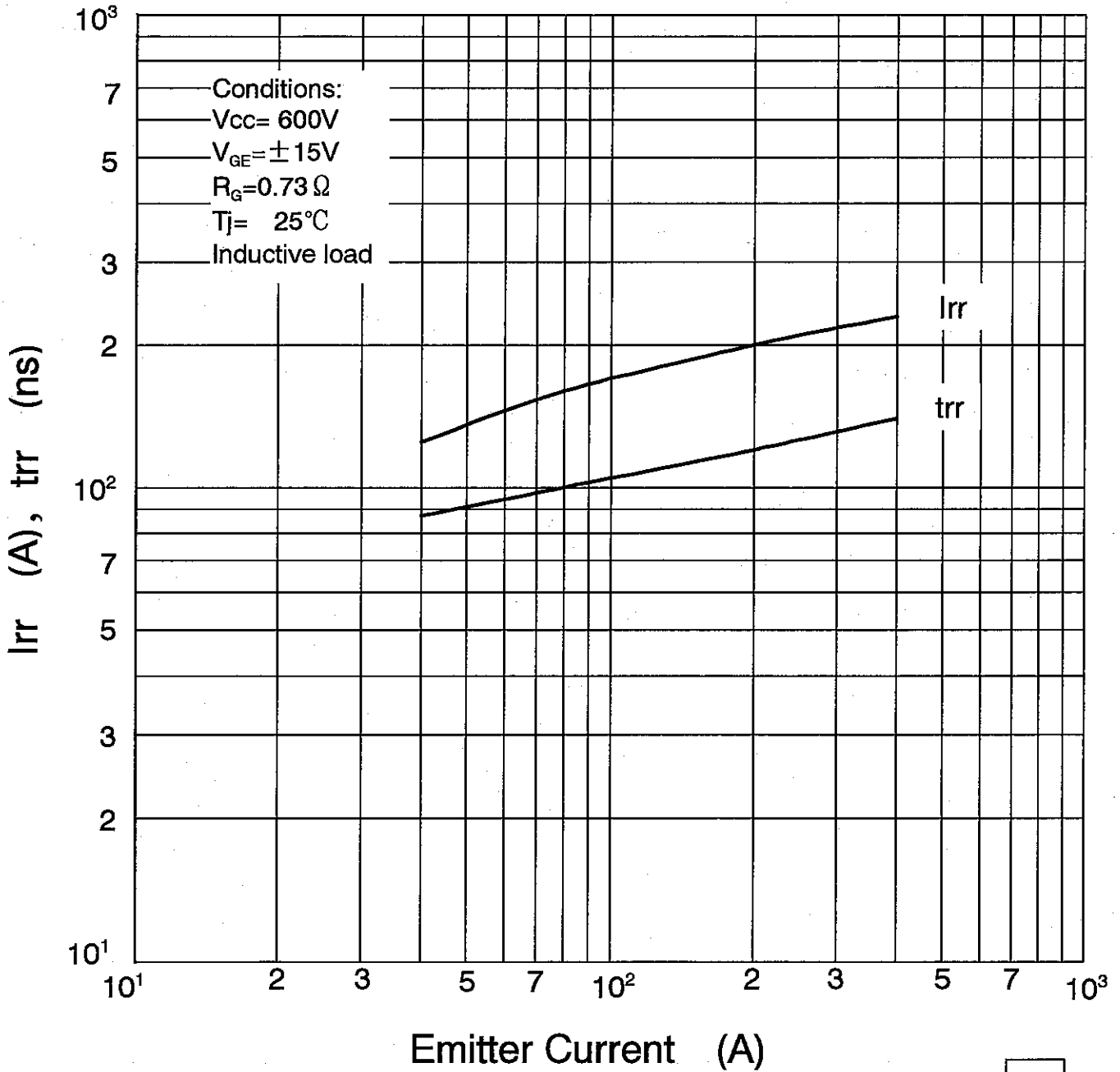
Half-Bridge Switching Characteristics (typical) CM400DY-24NF



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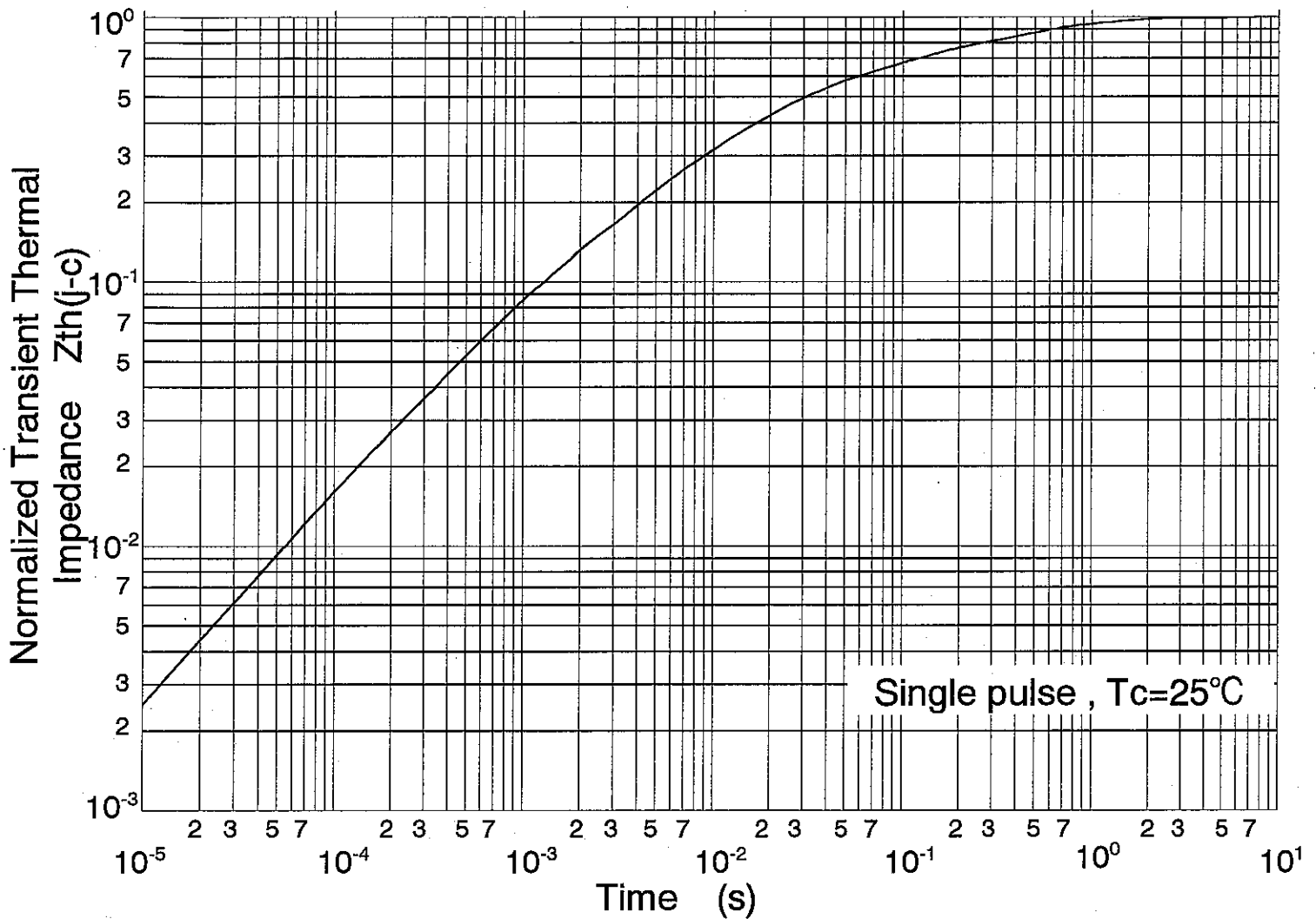
Reverse Recovery Characteristics
of Free-Wheel Diode
(typical)
CM400DY-24NF



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Transient Thermal Impedance Characteristics (IGBT part & FWD part) CM400DY-24NF



IGBT part :

Per unit base= $R_{th(j-c)}=0.085^{\circ}\text{C/W}$

FWD part :

Per unit base= $R_{th(j-c)}=0.15^{\circ}\text{C/W}$

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Gate Charge Characteristics
 (typical)
CM400DY-24NF

