

MITSUBISHI ELECTRIC CORPORATION

APPLICATION NOTE	Prepared by <i>S. Uchida</i>	Rev	A <i>S. Uchida</i>
	Approved by <i>M. Tabata 24-Oct-'02</i>		<i>m. yamanote Nov. 1. '02</i>

CMH5100.doc

Subject Performance Curves of CM300DY-12NF

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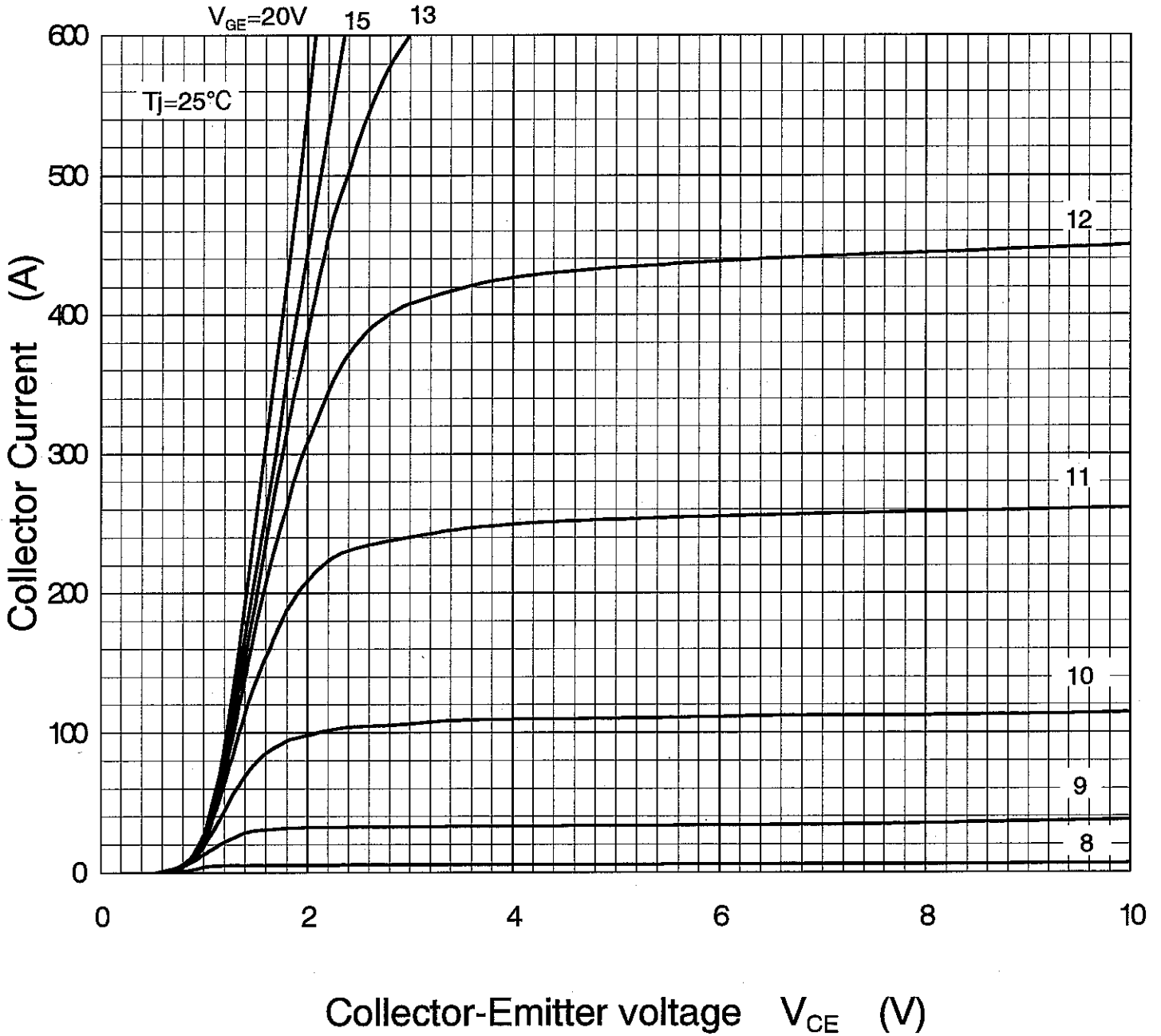
- Output Characteristics(typical)
- Collector-Emitter Saturation Voltage Characteristics(typical)
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Don't measure these static characteristics yourself by curve tracer.
 Usually, curve tracer has too much wiring inductance and device will be damaged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

IGBT Module	CMH-5100-A	APPLICATION NOTE
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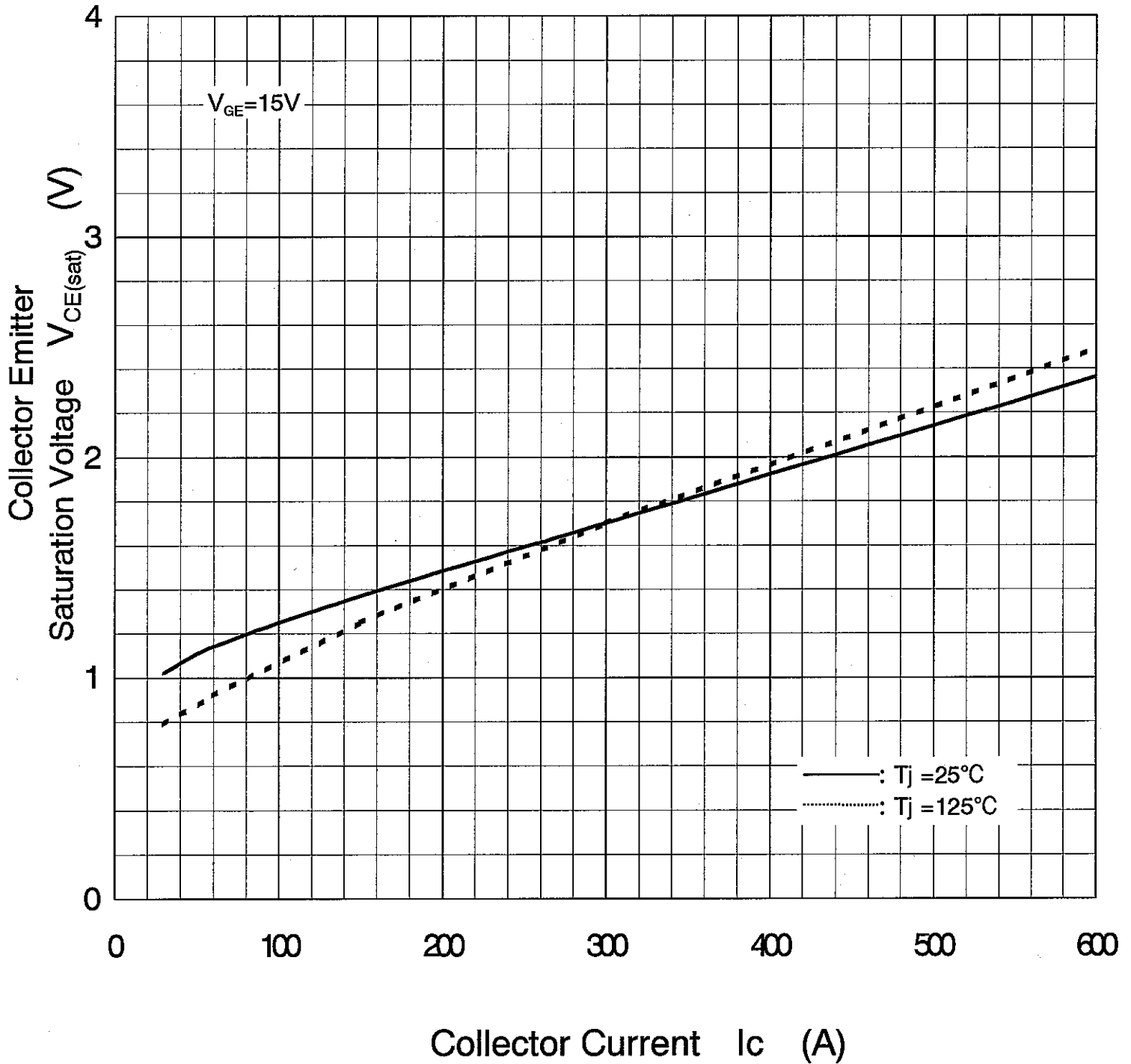
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Output Characteristics (Typical) CM300DY-12NF



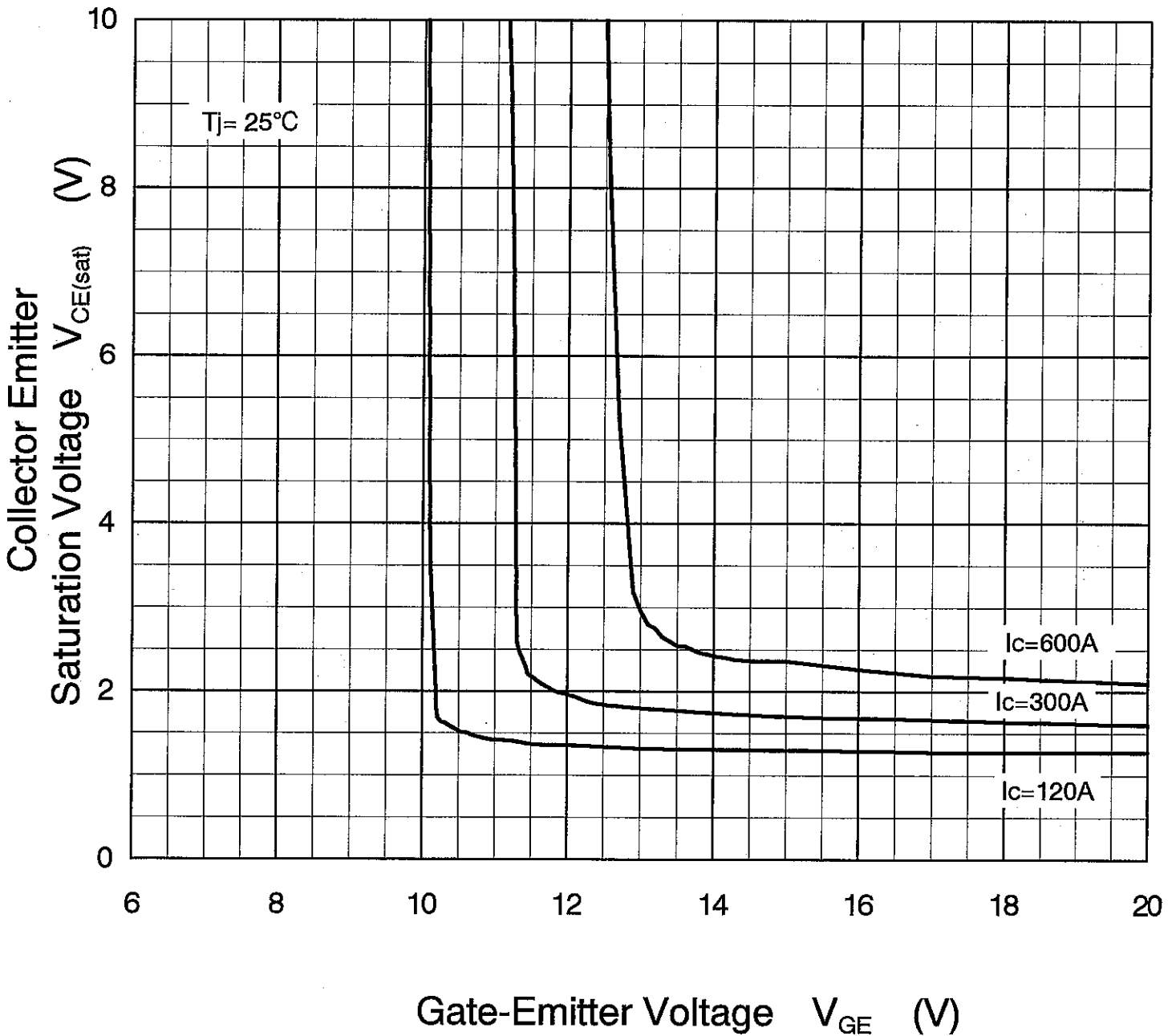
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Collector-Emitter Saturation Voltage Characteristics (Typical) CM300DY-12NF



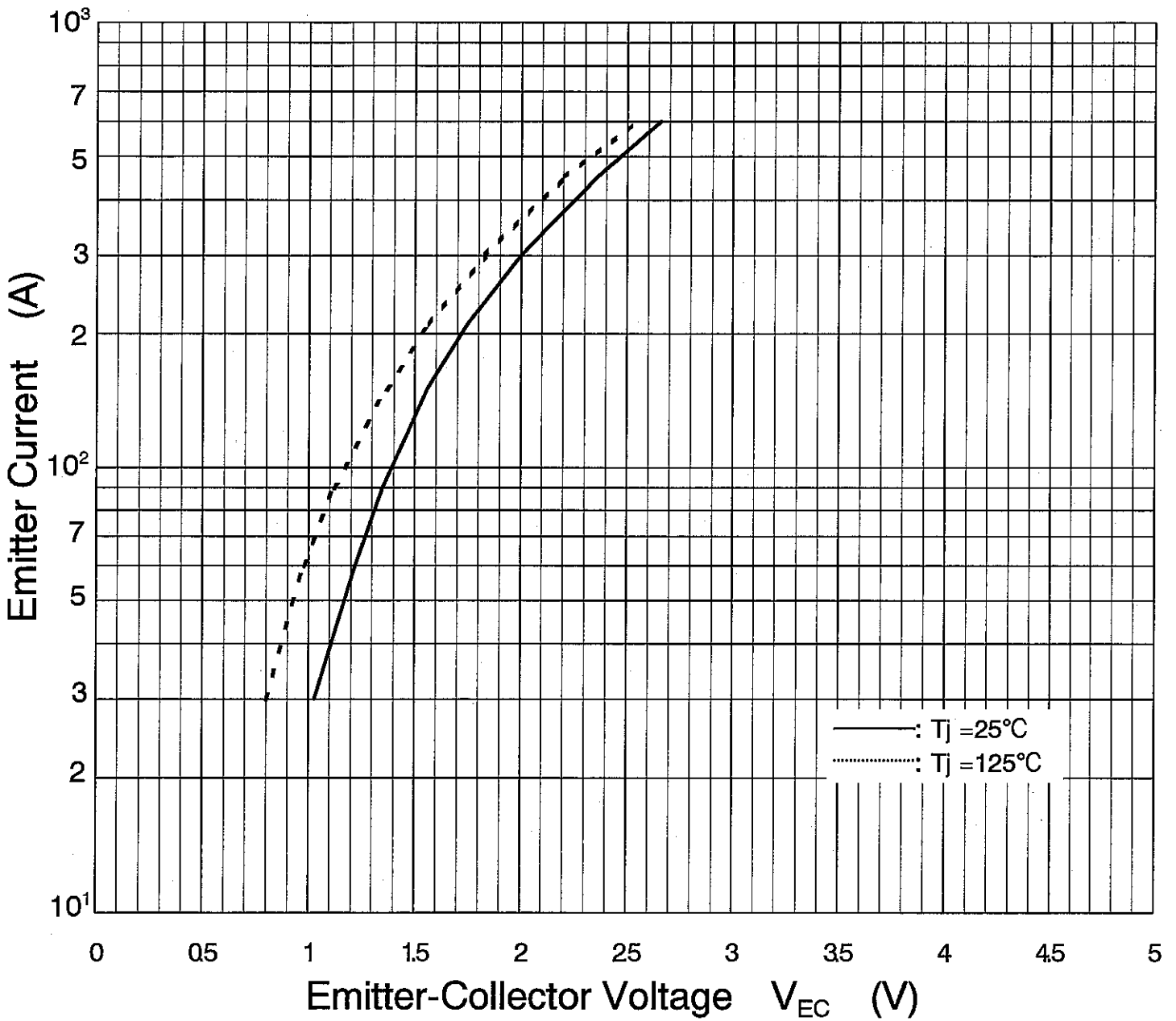
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Collector-Emitter Saturation Voltage Characteristics (Typical) CM300DY-12NF



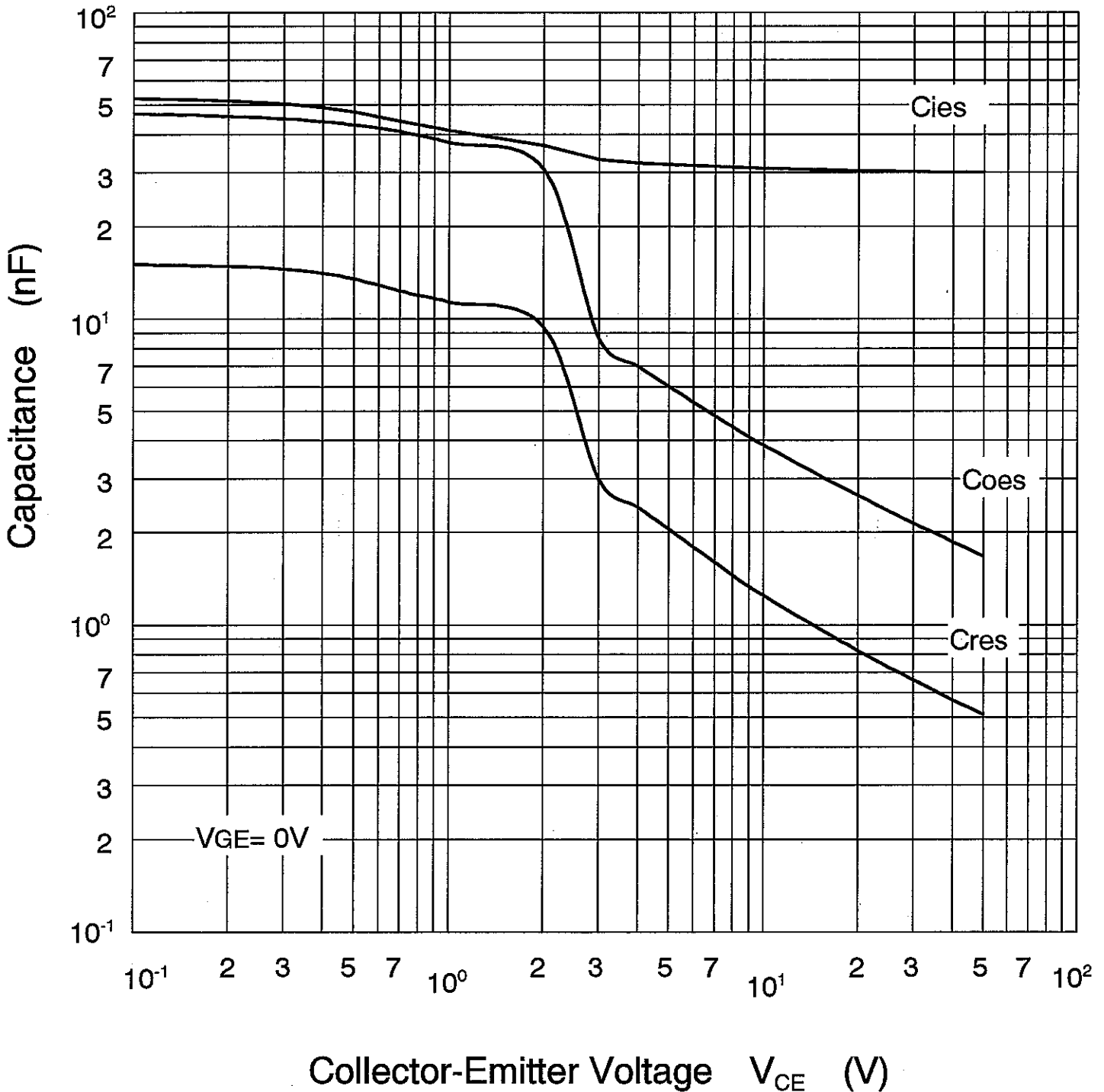
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Free-Wheel Diode Forward Characteristic (typical) CM300DY-12NF



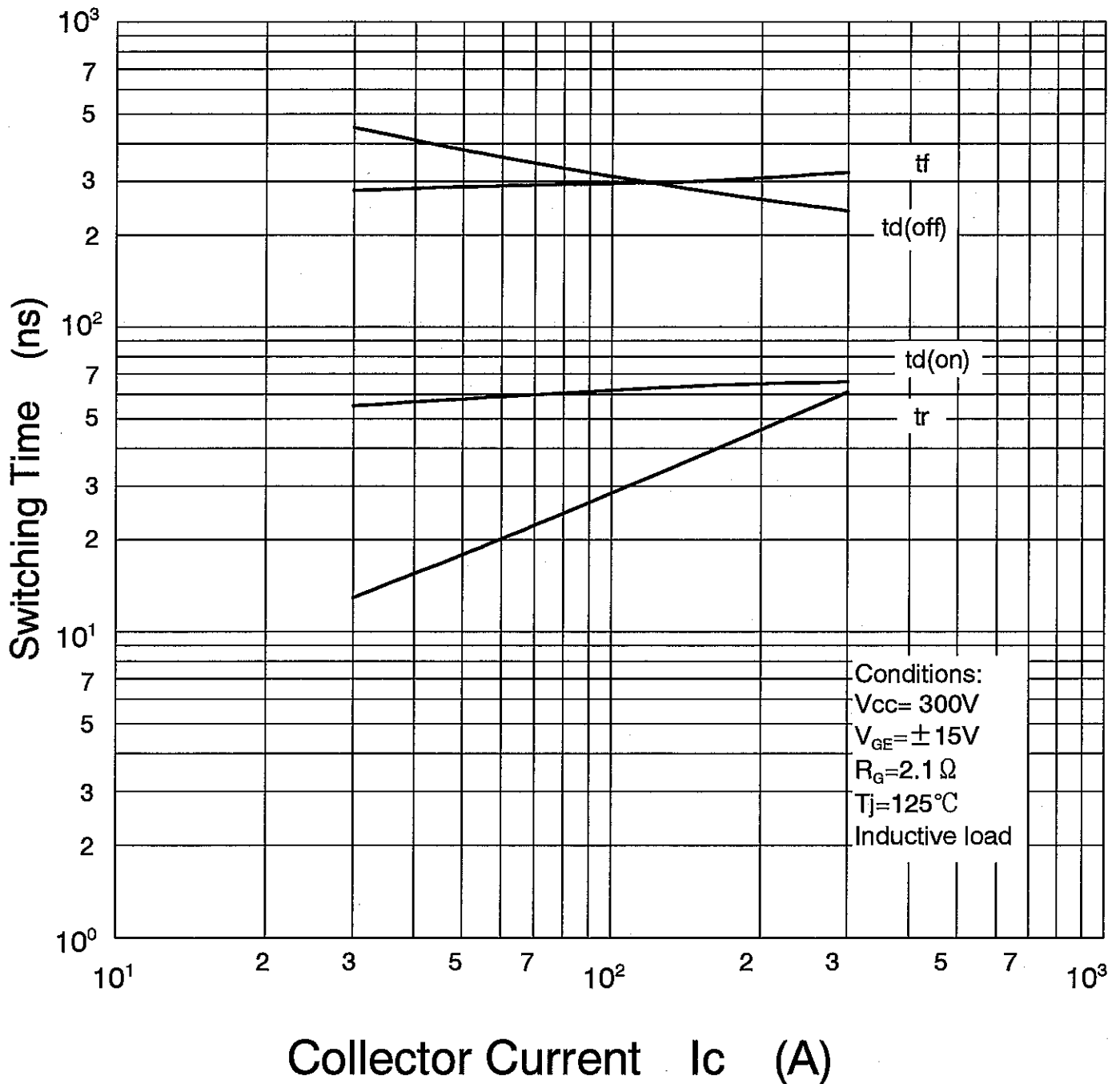
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Capacitance- V_{CE} Characteristics (typical) CM300DY-12NF



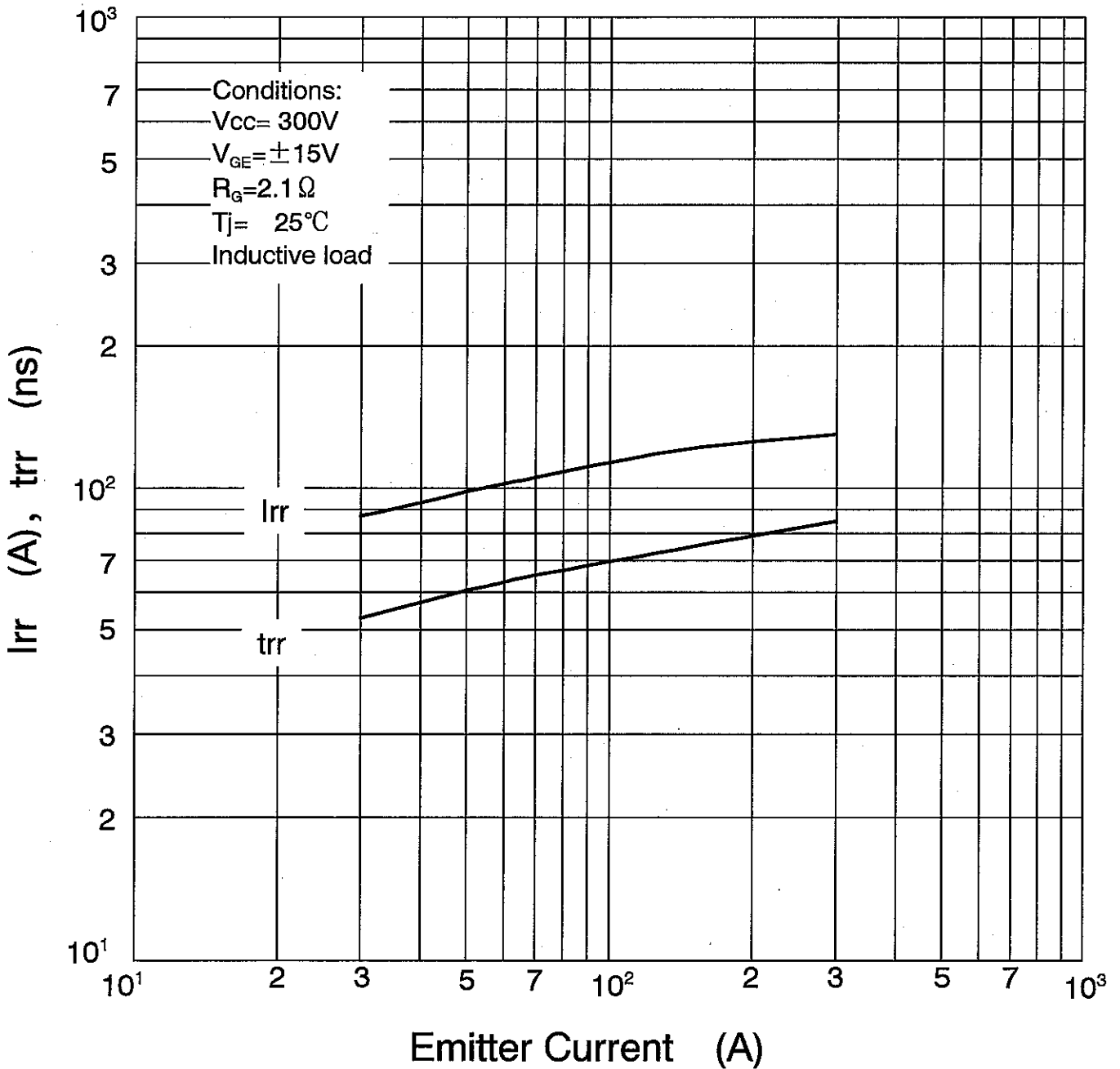
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Half-Bridge Switching Characteristics (typical) CM300DY-12NF



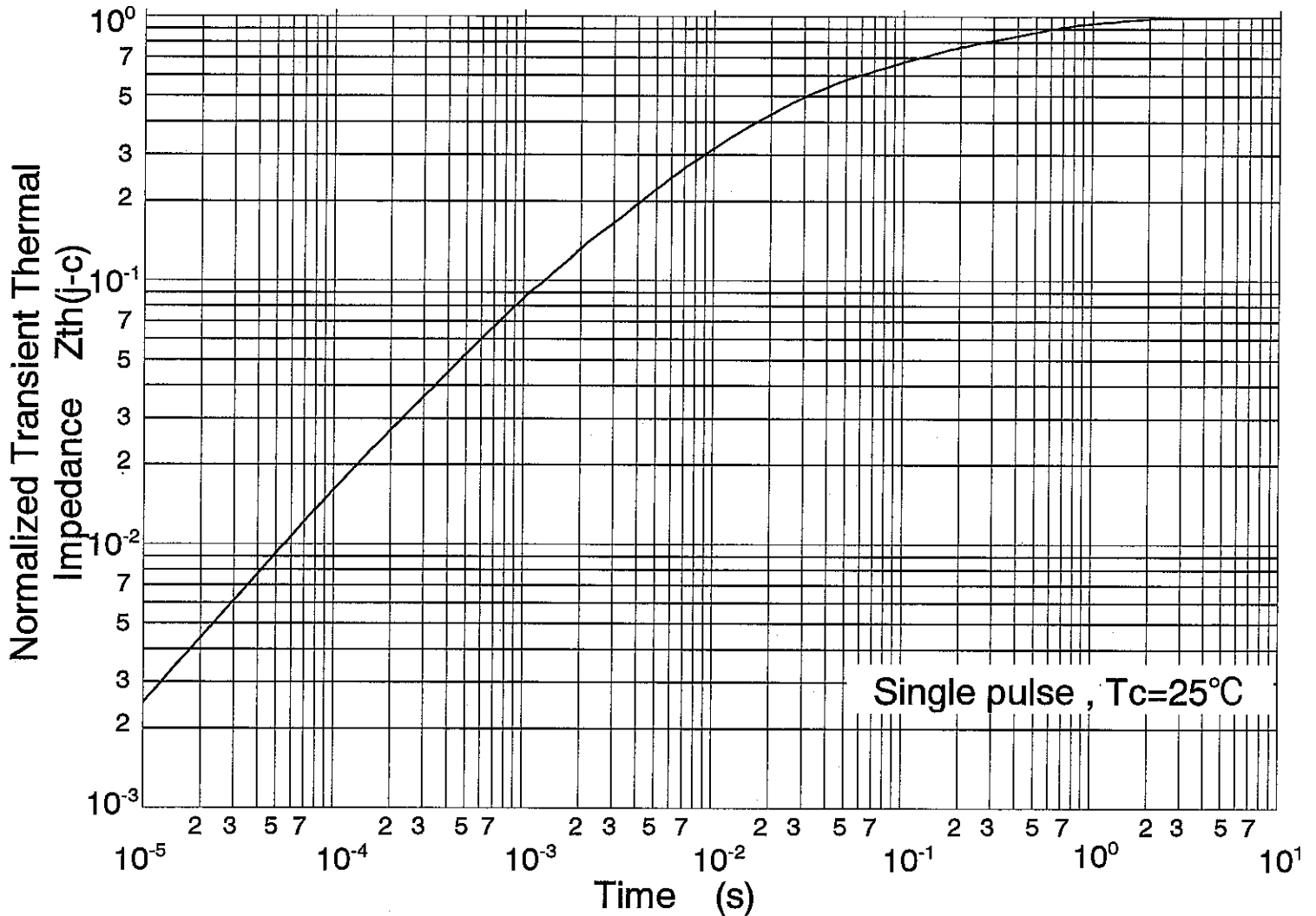
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Reverse Recovery Characteristics of Free-Wheel Diode (typical) CM300DY-12NF



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Transient Thermal Impedance Characteristics (IGBT part & FWD part) CM300DY-12NF



IGBT part :

Per unit base= $R_{th(j-c)}=0.16^{\circ}\text{C/W}$

FWD part :

Per unit base= $R_{th(j-c)}=0.25^{\circ}\text{C/W}$

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Gate Charge Characteristics
 (typical)
CM300DY-12NF

