

MITSUBISHI ELECTRIC CORPORATION

APPLICATION NOTE	Prepared by	<i>K. Miki, H. Kojima</i>	Rev	
	Approved by	<i>T. Furuta 25-Sep-03</i>		

CMH5596.doc

Subject Performance Curves of CM100DY-24A

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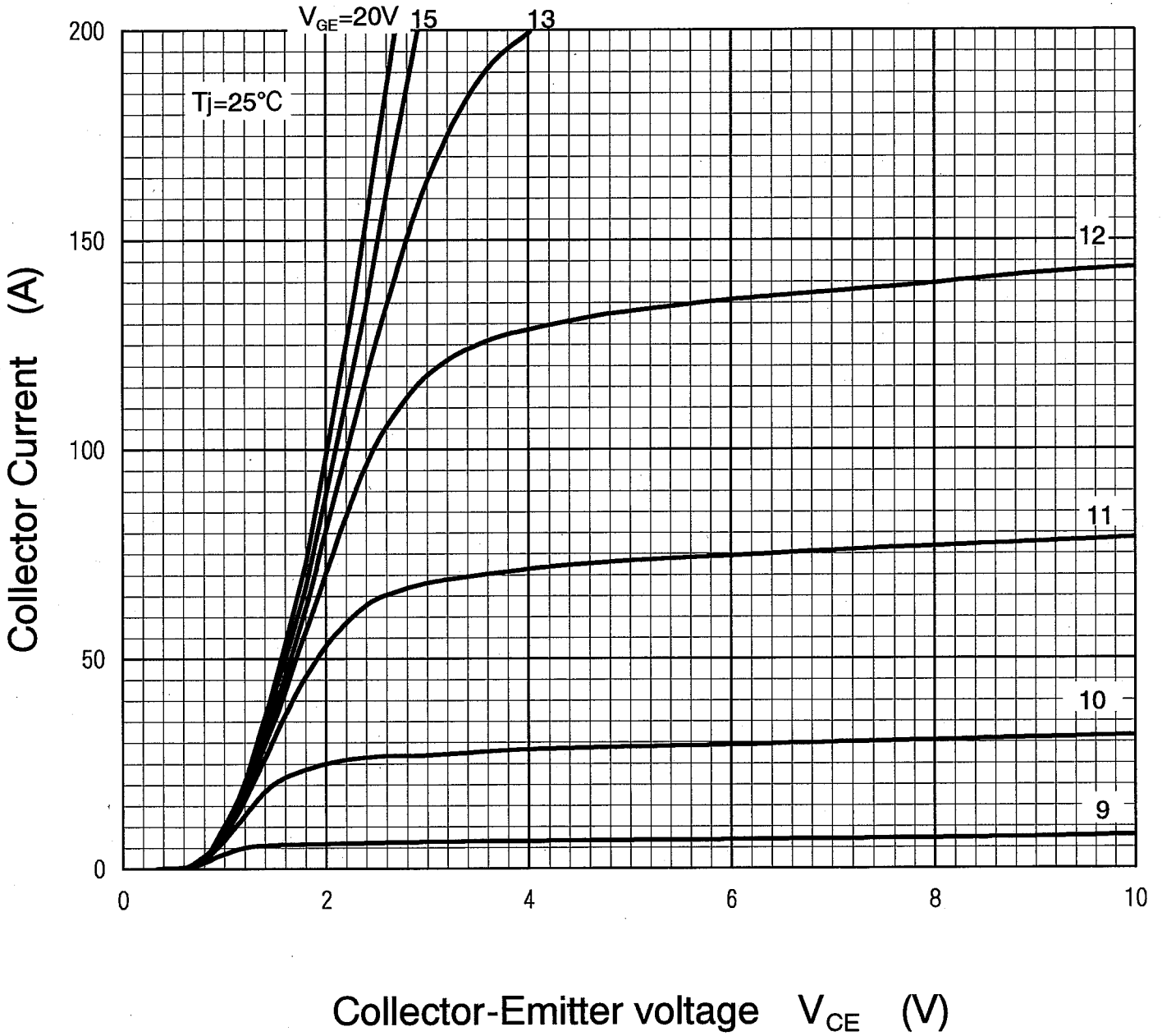
- Output Characteristics(typical)
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Don't measure these static characteristics yourself by curve tracer.
Usually, curve tracer has too much wiring inductance and device will be damaged by over voltage from oscillation.

IGBT Module	CMH-5596-	APPLICATION NOTE
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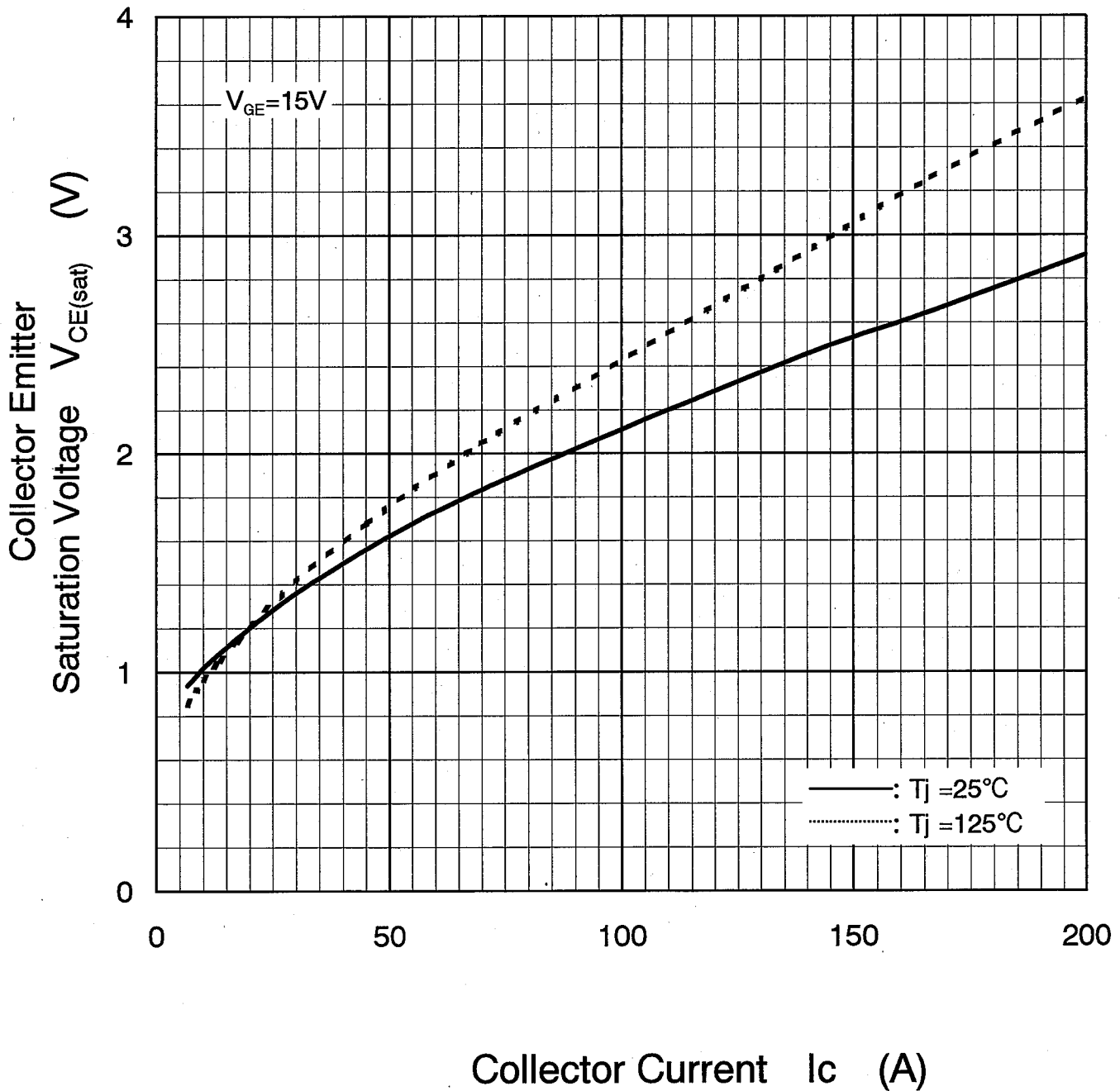
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Output Characteristics (Typical) CM100DY-24A



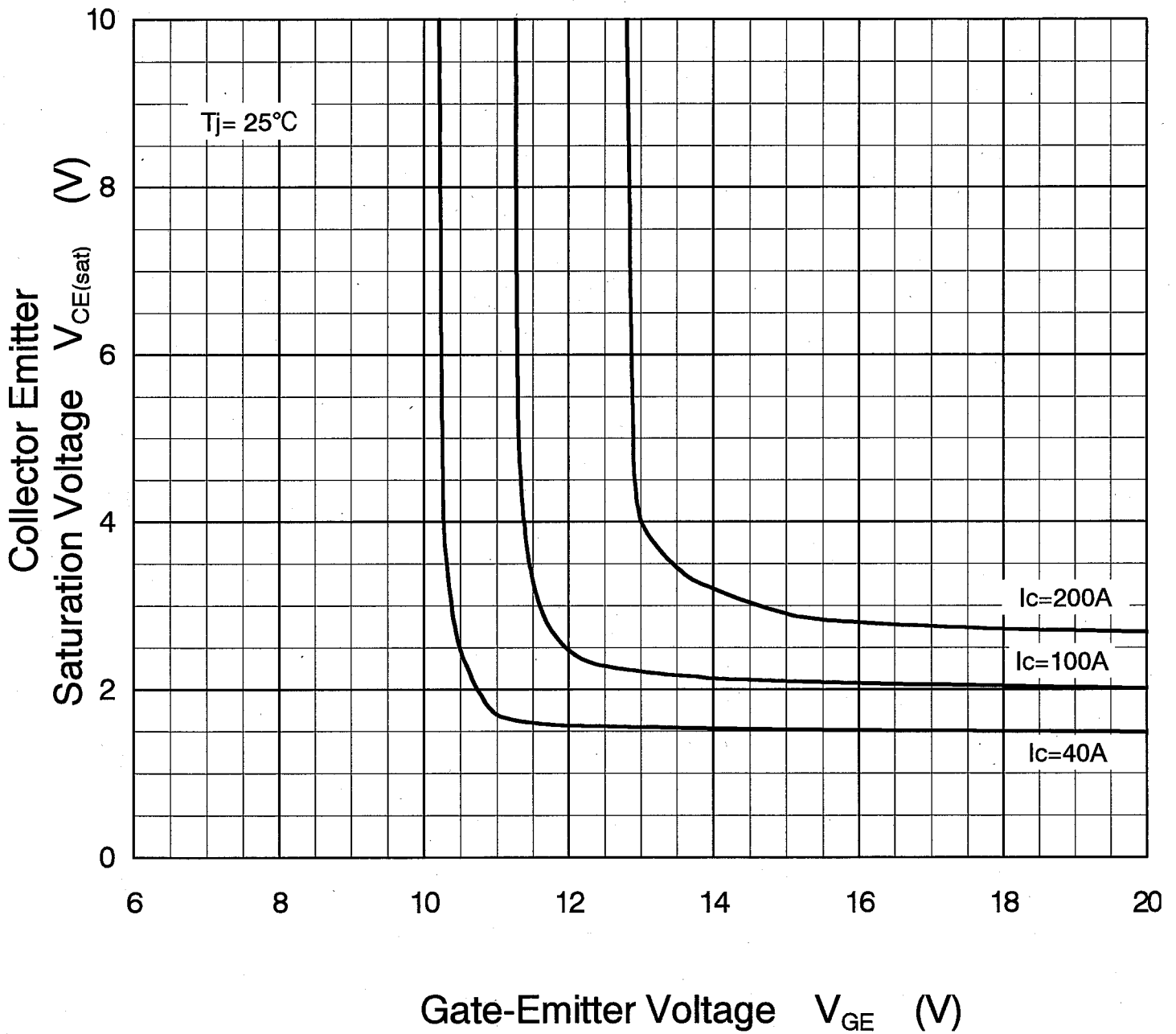
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Collector-Emitter Saturation Voltage Characteristics (Typical) CM100DY-24A



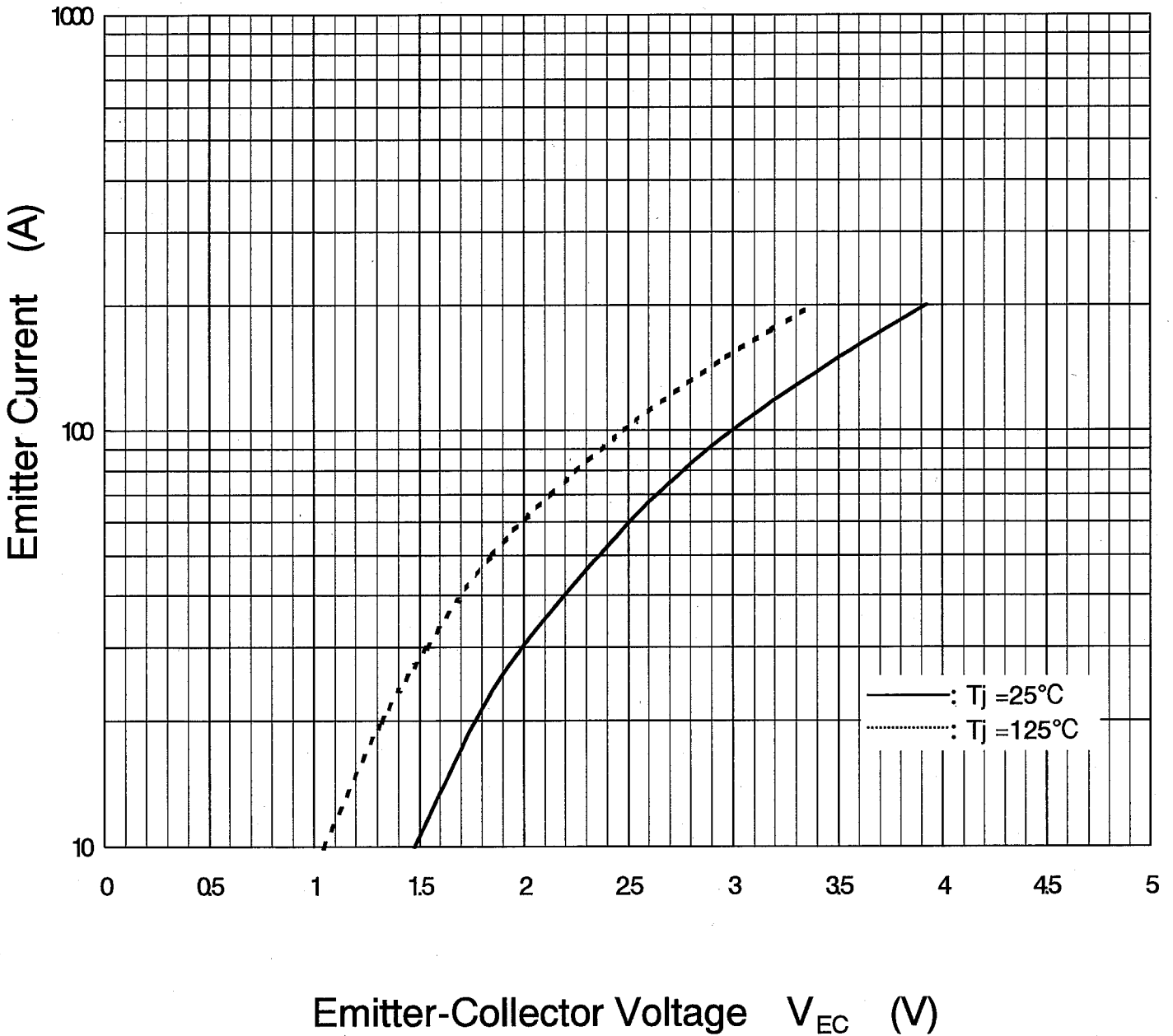
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Collector-Emitter Saturation Voltage Characteristics (Typical) CM100DY-24A



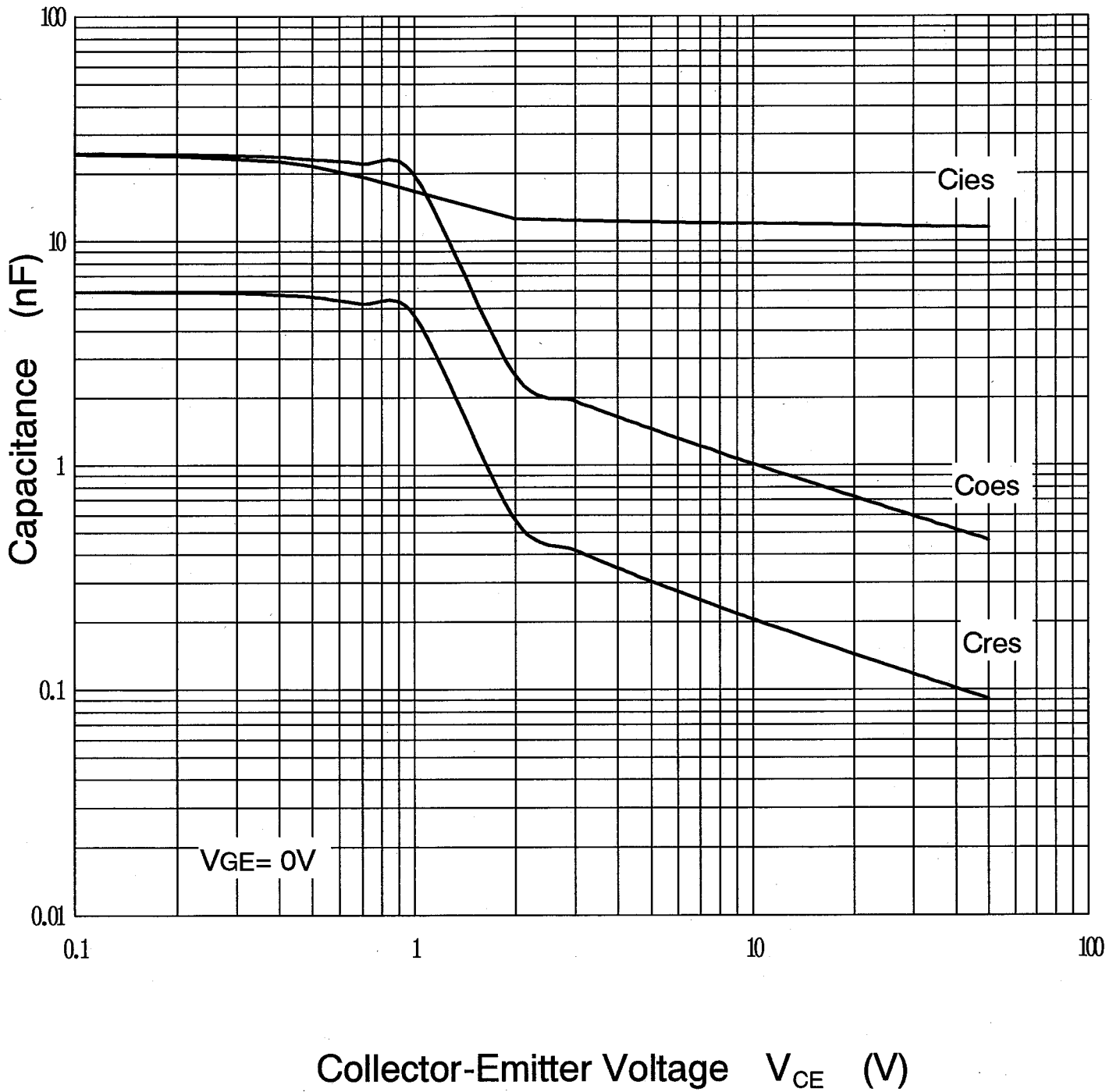
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Free-Wheel Diode Forward Characteristics (typical) CM100DY-24A



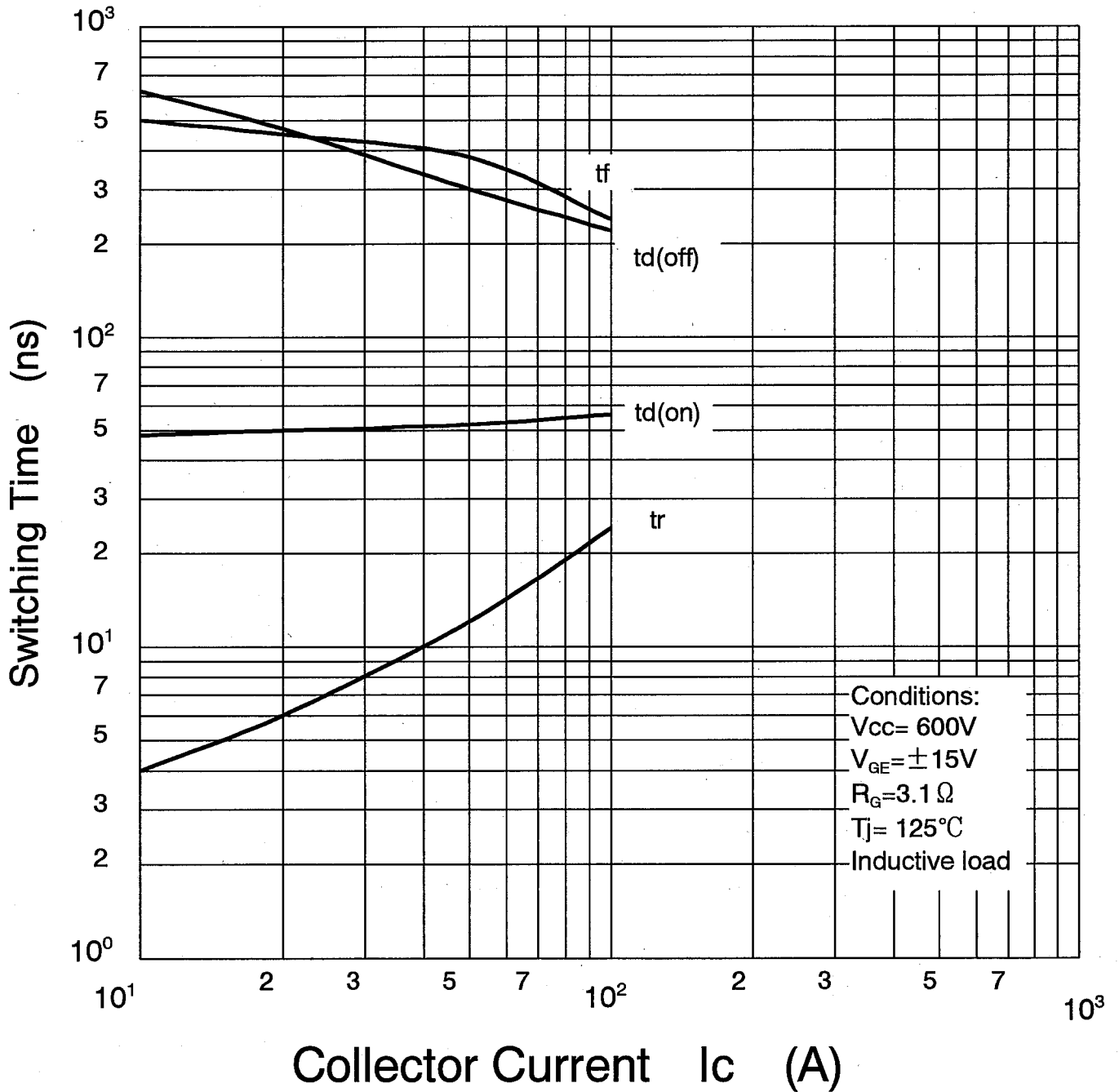
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Capacitance- V_{CE} Characteristics (typical) CM100DY-24A



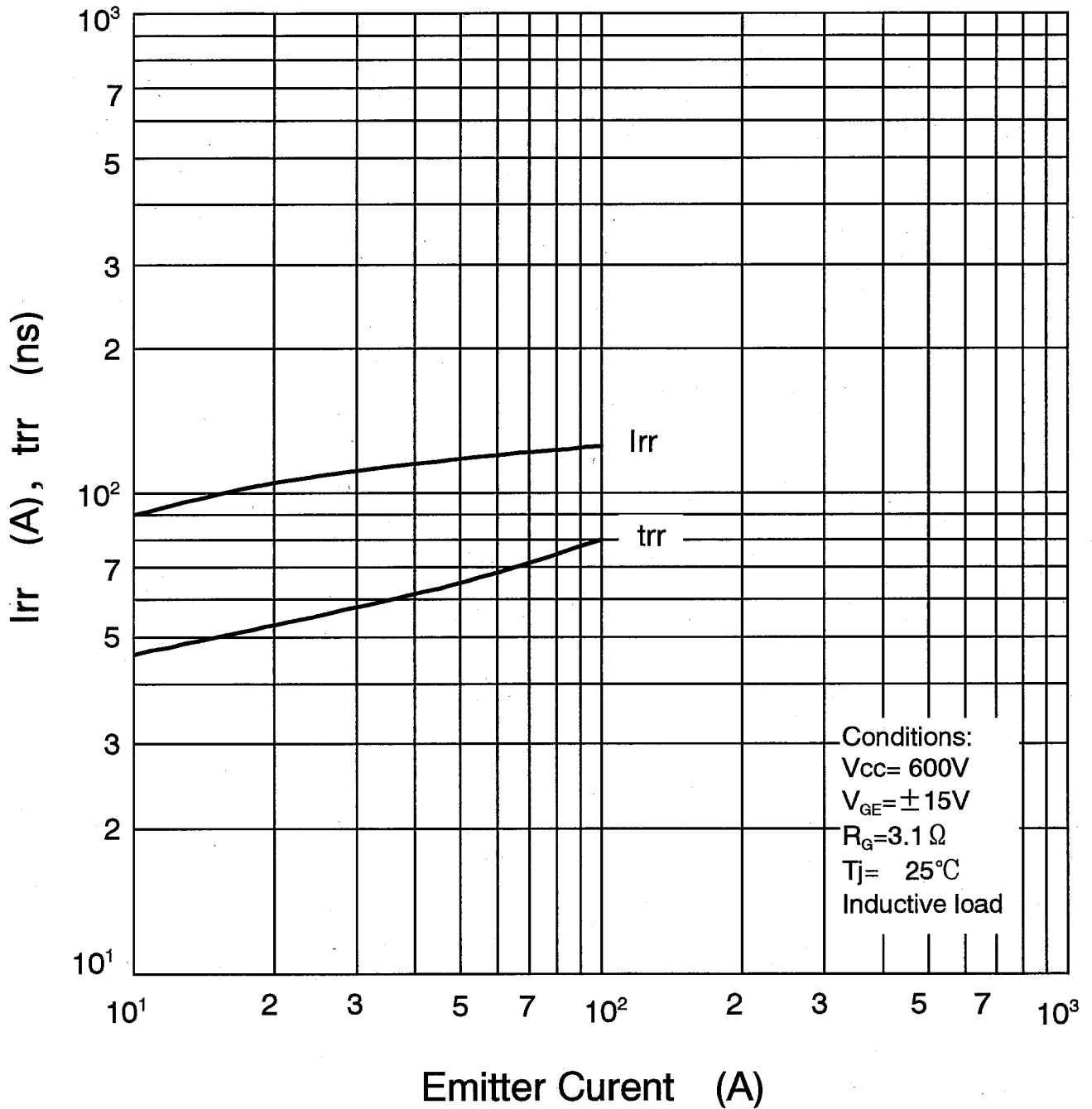
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Half-Bridge Switching Characteristics (typical) CM100DY-24A



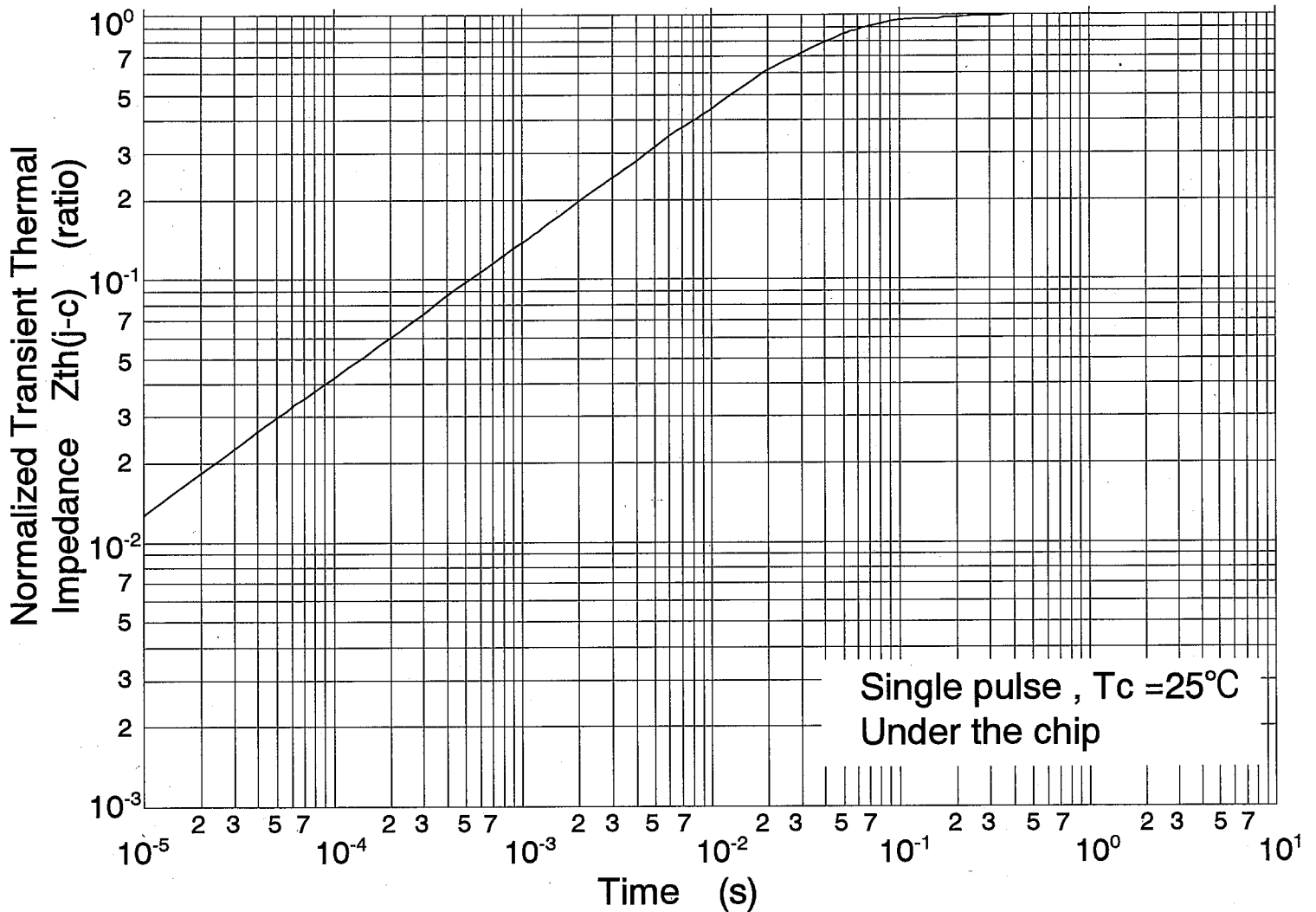
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Reverse Recovery Characteristics of Free-Wheel Diode (typical) CM100DY-24A



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Transient Thermal Impedance Characteristics (IGBT part & FWD part) CM100DY-24A



IGBT part :

Per unit base= $R_{th(j-c)}=0.186^\circ\text{C/W}$

FWD part :

Per unit base= $R_{th(j-c)}=0.34^\circ\text{C/W}$

T_c measured point is just under the chips.

IGBT Module	CMH-5596-	APPLICATION NOTE
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Gate Charge Characteristics
(typical)
CM100DY-24A

