

MITSUBISHI ELECTRIC CORPORATION

APPLICATION NOTE	Prepared by	H.Hanada	Rev	C	<i>M. Kanao</i>
	Approved by	M.Tabata 1-Apr.-'03			<i>T. Furuta 25-Sep-03</i>

CMH5341C.doc

Subject Performance Curves of CM300DY-24A

Contents

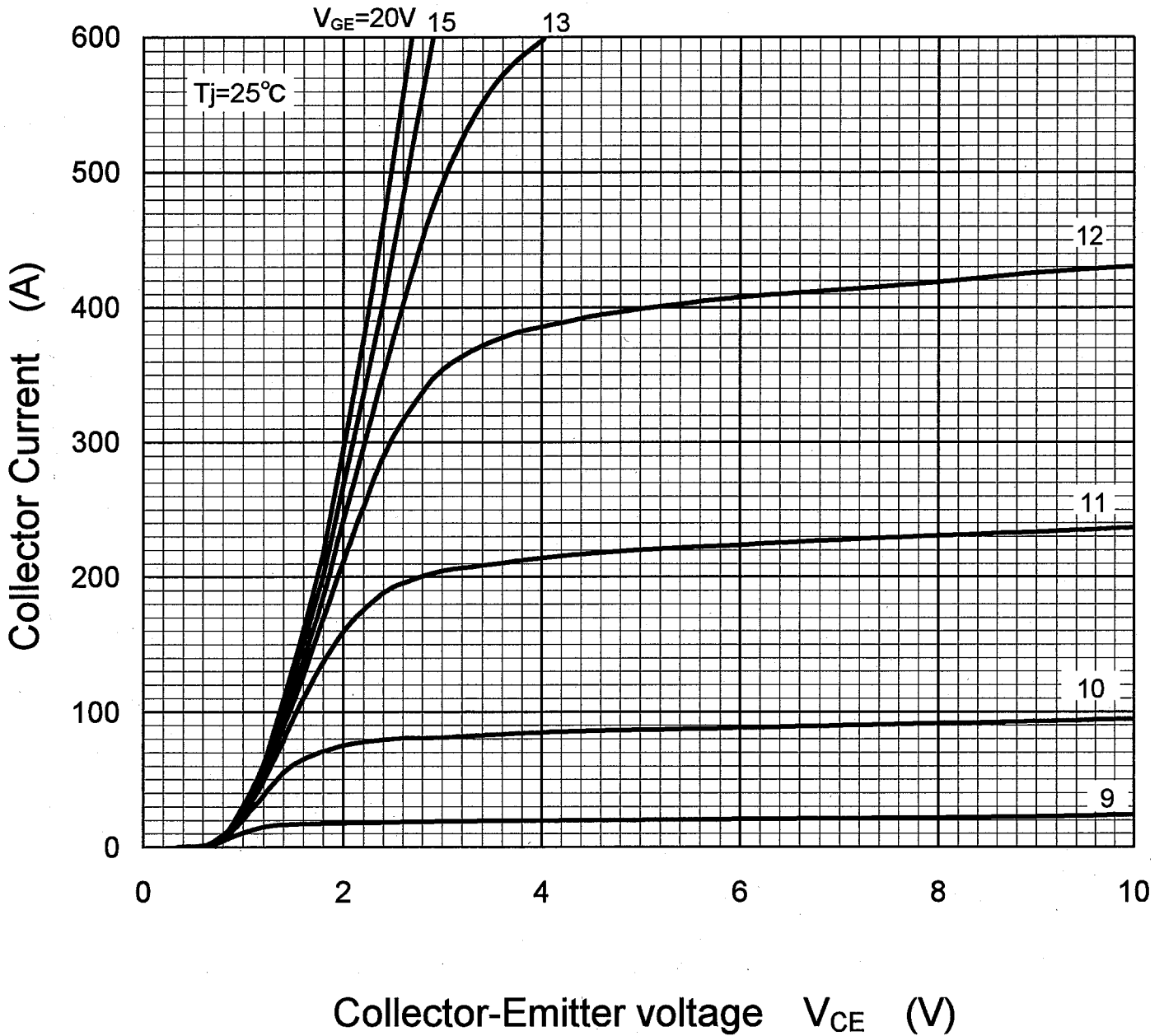
- Output Characteristics(typical)
- Collector-Emitter Saturation Voltage Characteristics(typical)
- Collector-Emitter Saturation Voltage Characteristics(typical)
- Free-Wheel Diode Forward Characteristics(typical)
- Capacitance-VCE Characteristics(typical)
- Half-Bridge Switching Characteristics(typical)
- Reverse Recovery Characteristics of Free-Wheel Diode(typical)
- Transient Thermal Impedance Characteristics(IGBT part&FWDi part)
- Gate Charge Characteristics(typical)

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-5341-C	APPLICATION NOTE
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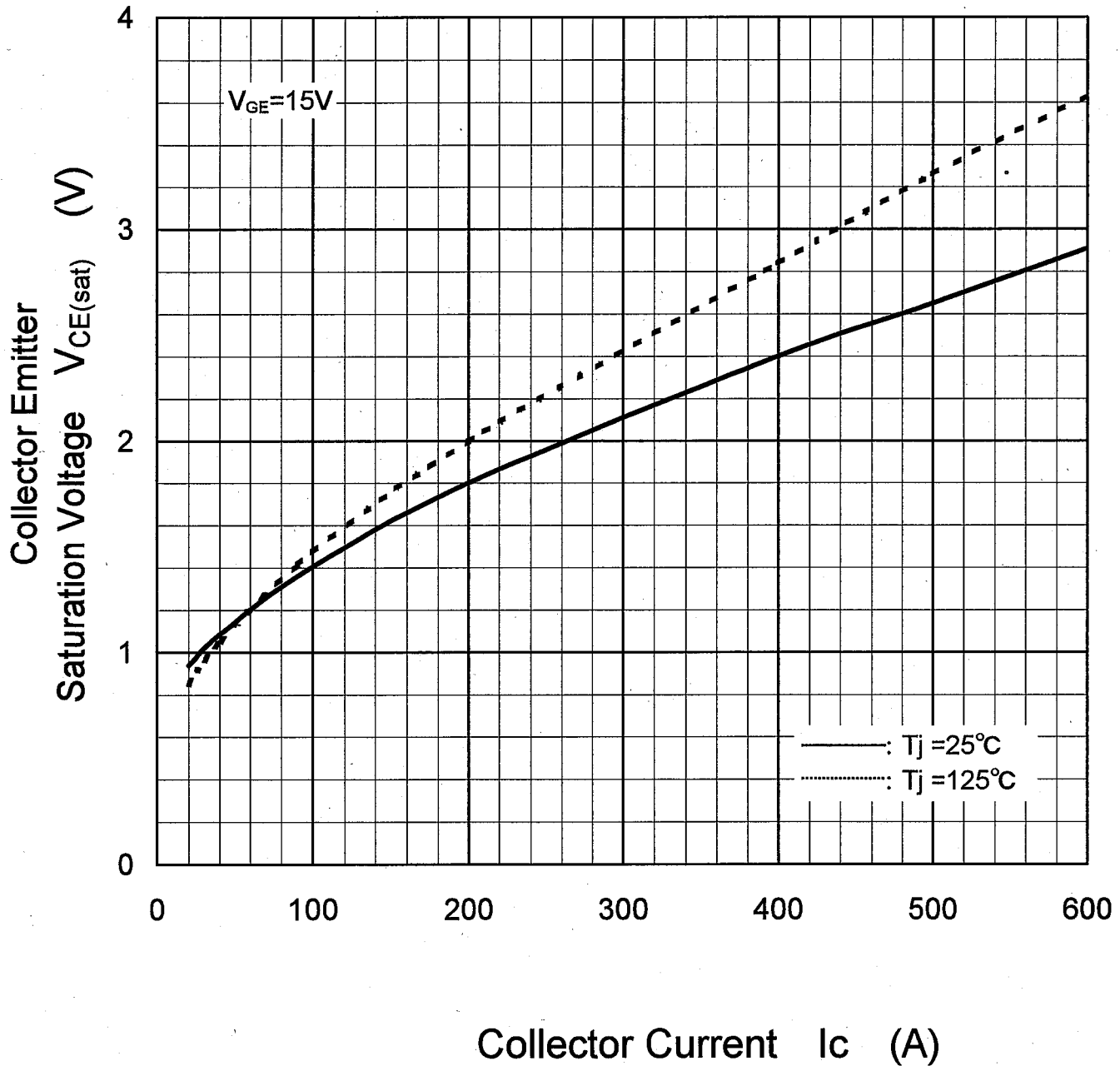
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Output Characteristics (Typical) CM300DY-24A



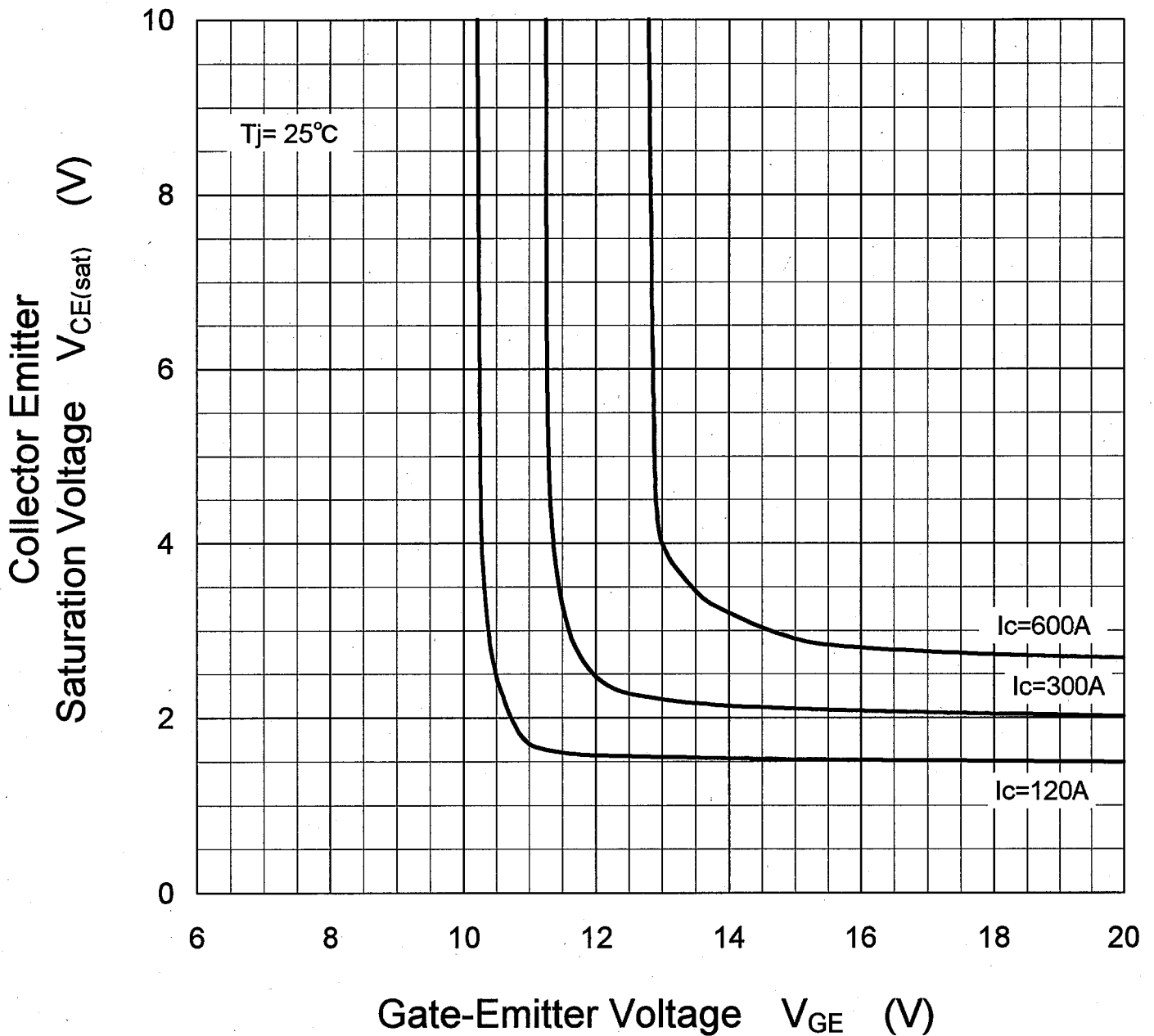
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Collector-Emitter Saturation Voltage Characteristics (Typical) CM300DY-24A



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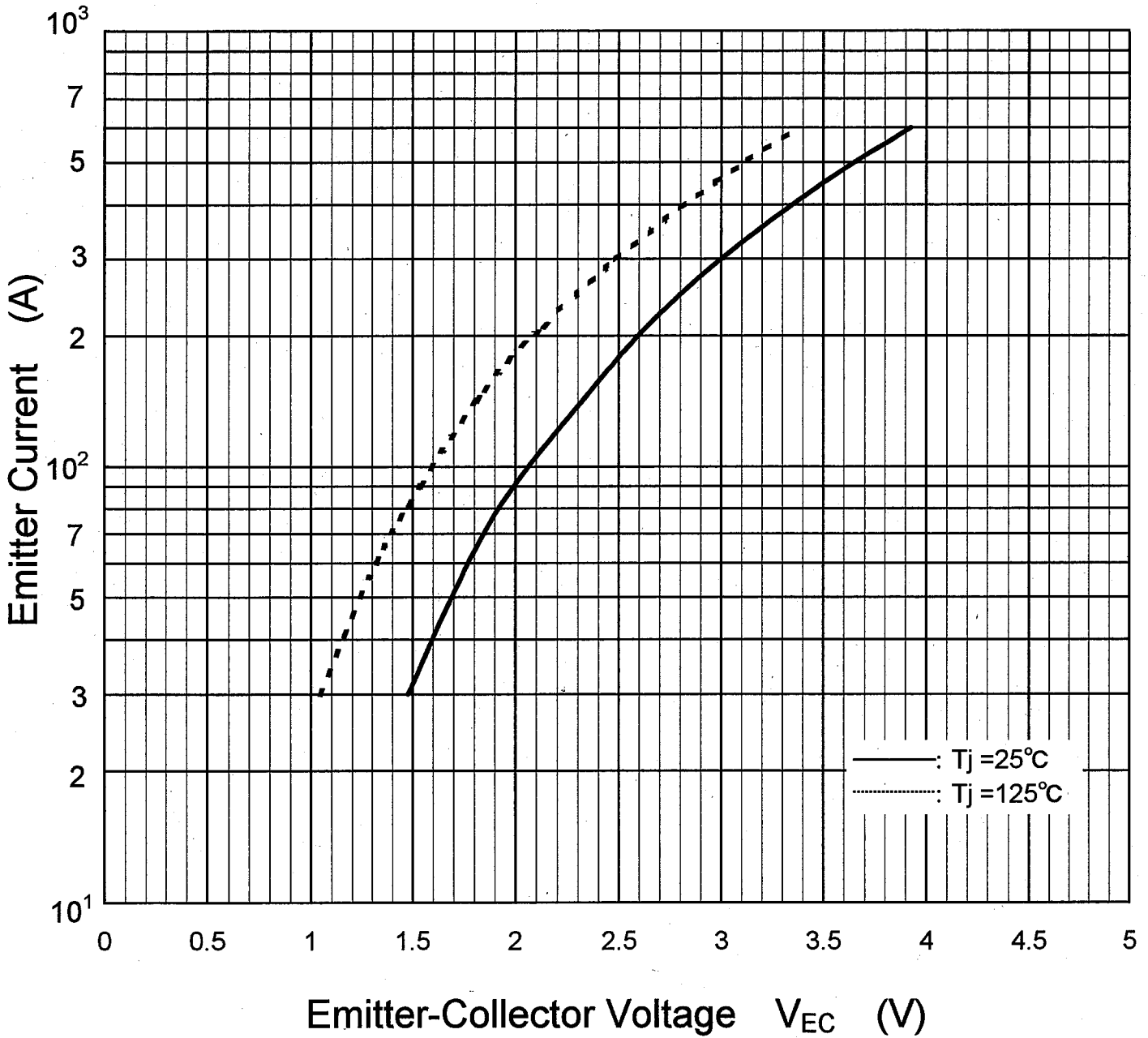
Collector-Emitter Saturation Voltage Characteristics (Typical) CM300DY-24A



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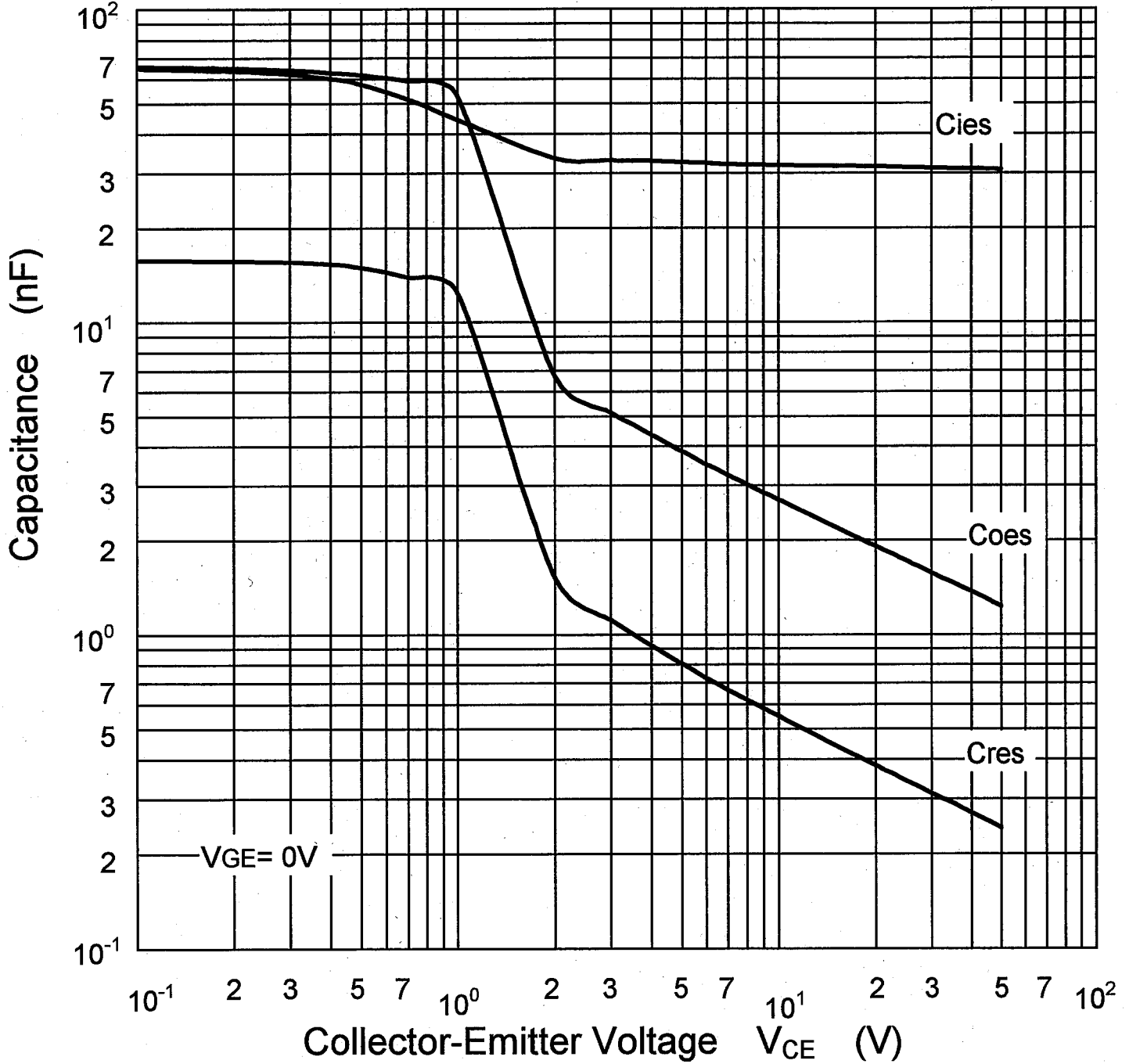
APPLICATION NOTE	Prepared by		Rev	
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Free-Wheel Diode Forward Characteristics (typical) CM300DY-24A



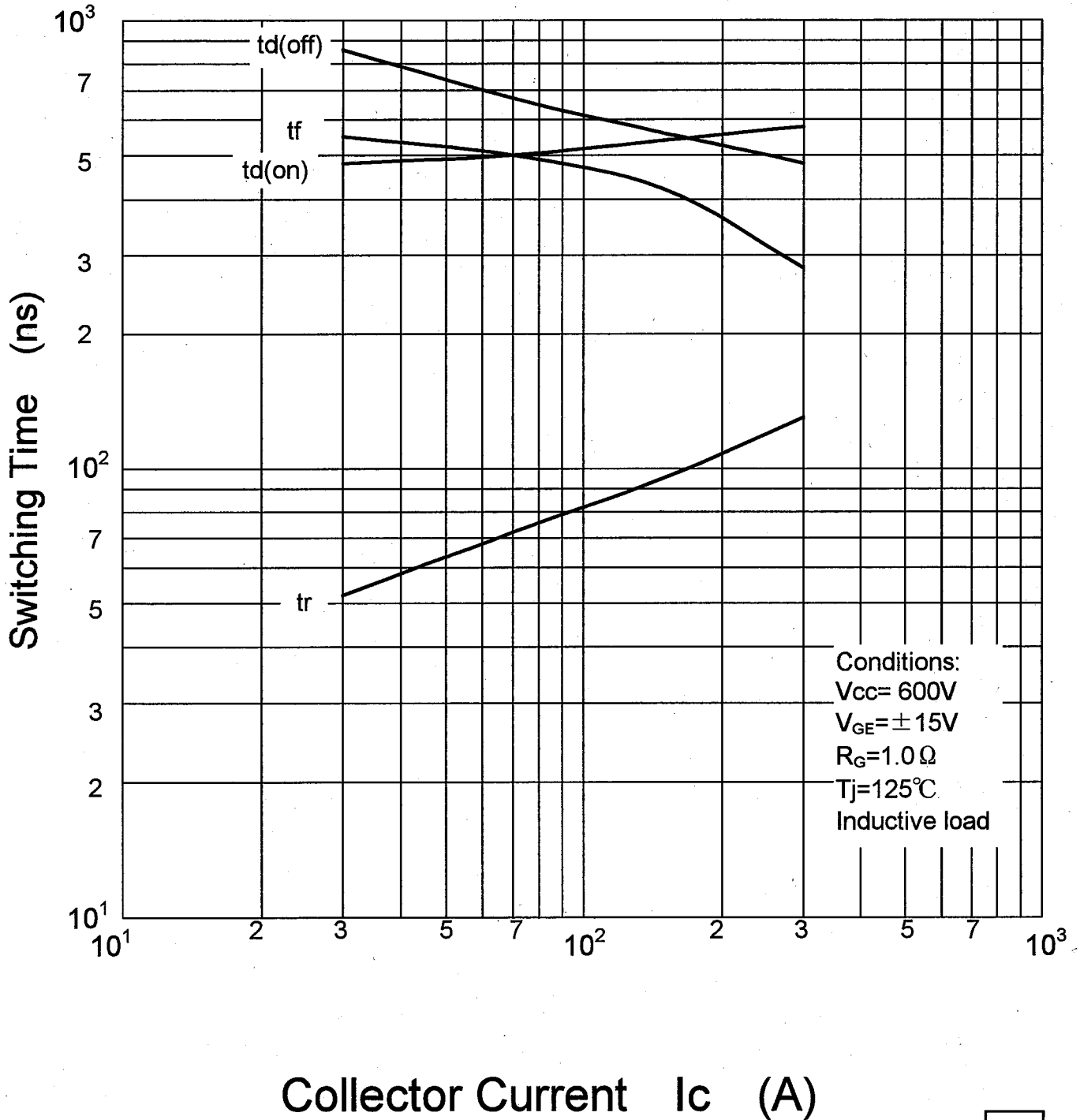
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Capacitance-VCE Characteristics
(typical)
CM300DY-24A



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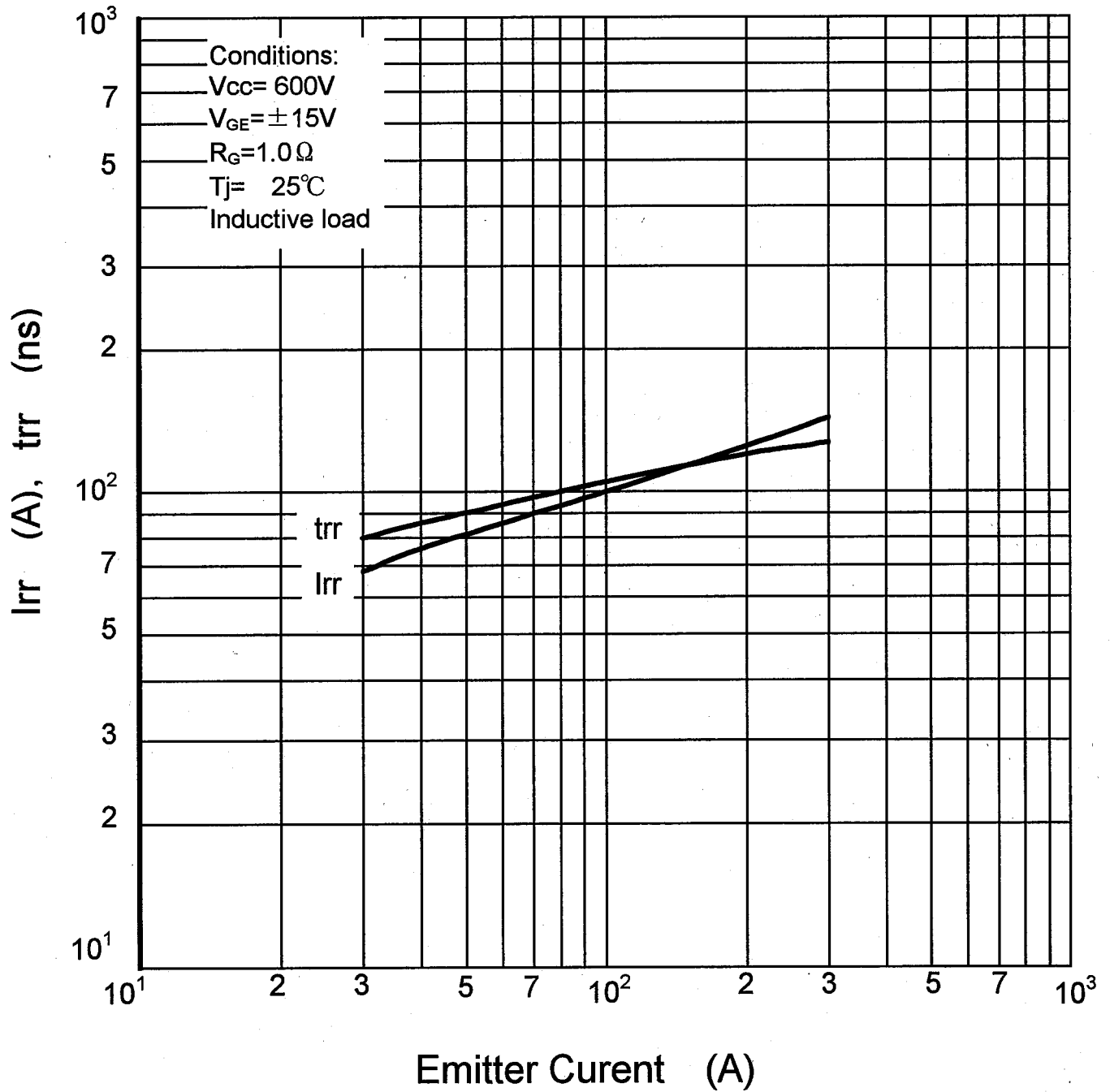
Half-Bridge Switching Characteristics (typical) CM300DY-24A



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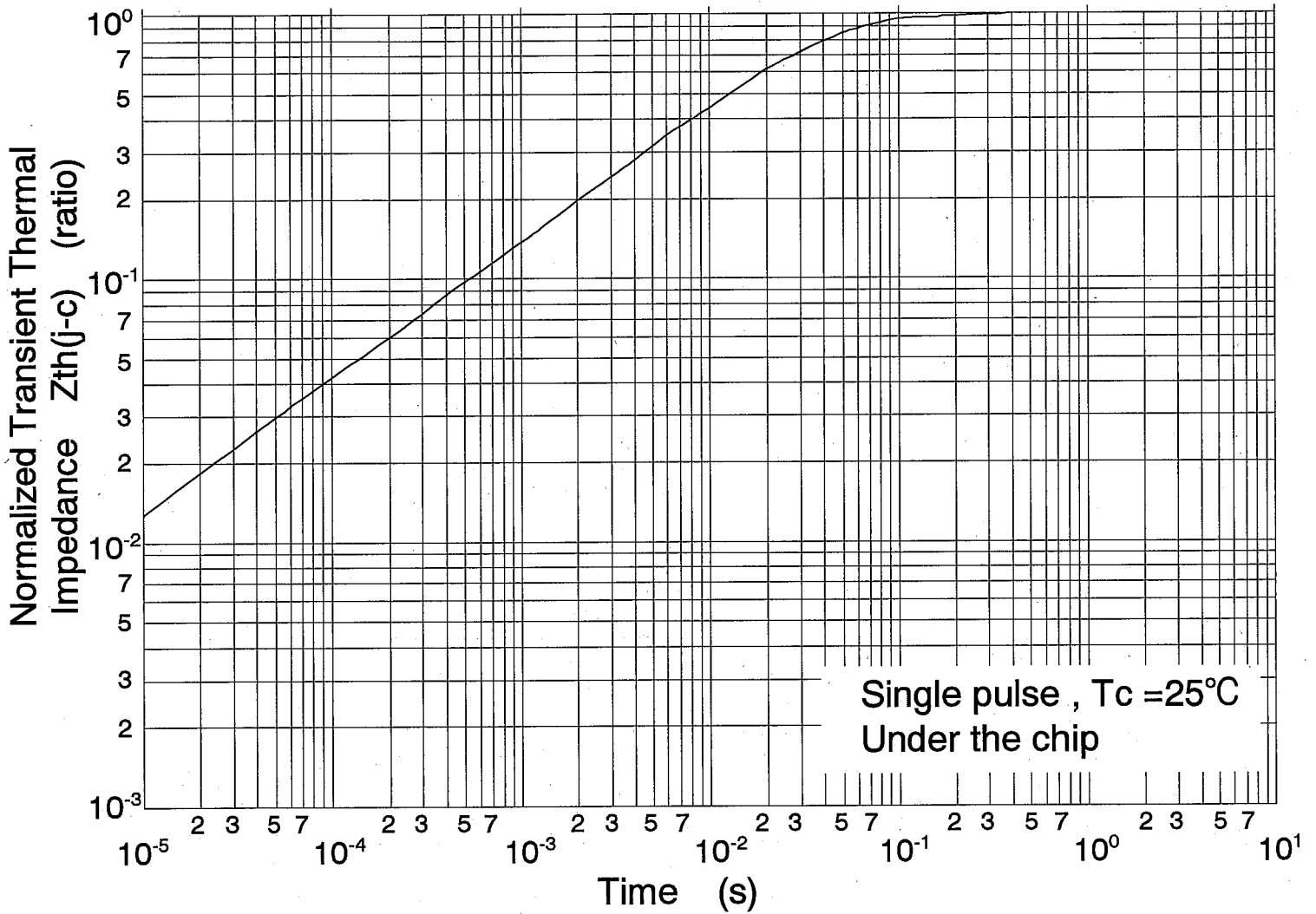
Reverse Recovery Characteristics of Free-Wheel Diode (typical) CM300DY-24A



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Transient Thermal Impedance Characteristics (IGBT part & FWD part) CM300DY-24A



IGBT part :

Per unit base= $R_{th(j-c)}=0.066^{\circ}\text{C/W}$

FWD part :

Per unit base= $R_{th(j-c)}=0.12^{\circ}\text{C/W}$

B

Tc measured point is just under the chips.

C

IGBT Module	CMH-5341-C	APPLICATION NOTE
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Gate Charge Characteristics
(typical)
CM300DY-24A

