

# MITSUBISHI ELECTRIC CORPORATION

APPLICATION NOTE	Prepared by	<i>S. Uchida</i>	Rev	
	Approved by	<i>M. Takata 29-Oct-'02</i>		

CMH5103.doc

**Subject** Performance Curves of CM100DY-24NF

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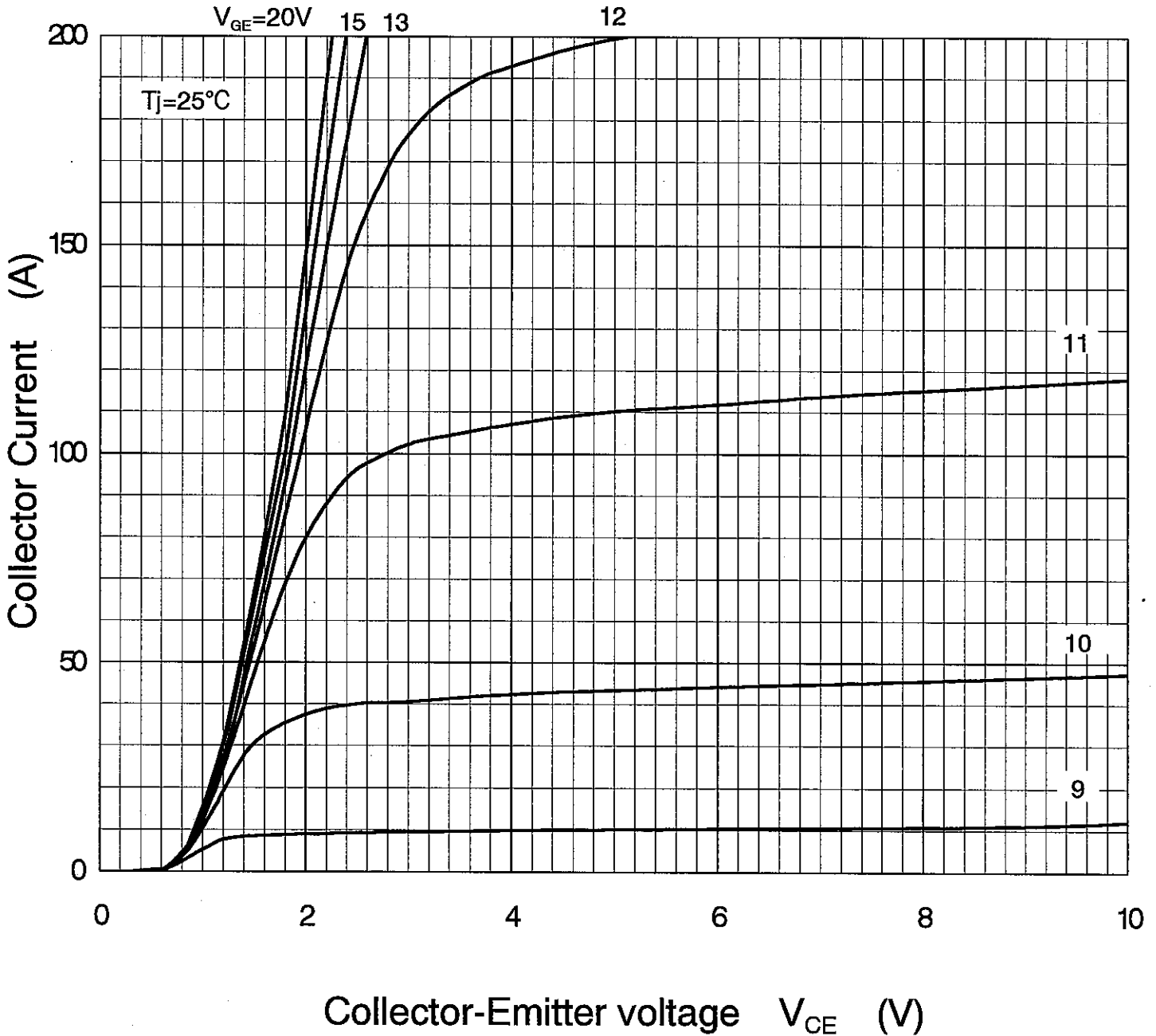
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Don't measure these static characteristics yourself by curve tracer.  
 Usually, curve tracer has too much wiring inductance and device will be damaged by over voltage from oscillation.

IGBT Module	CMH-5103-	APPLICATION NOTE
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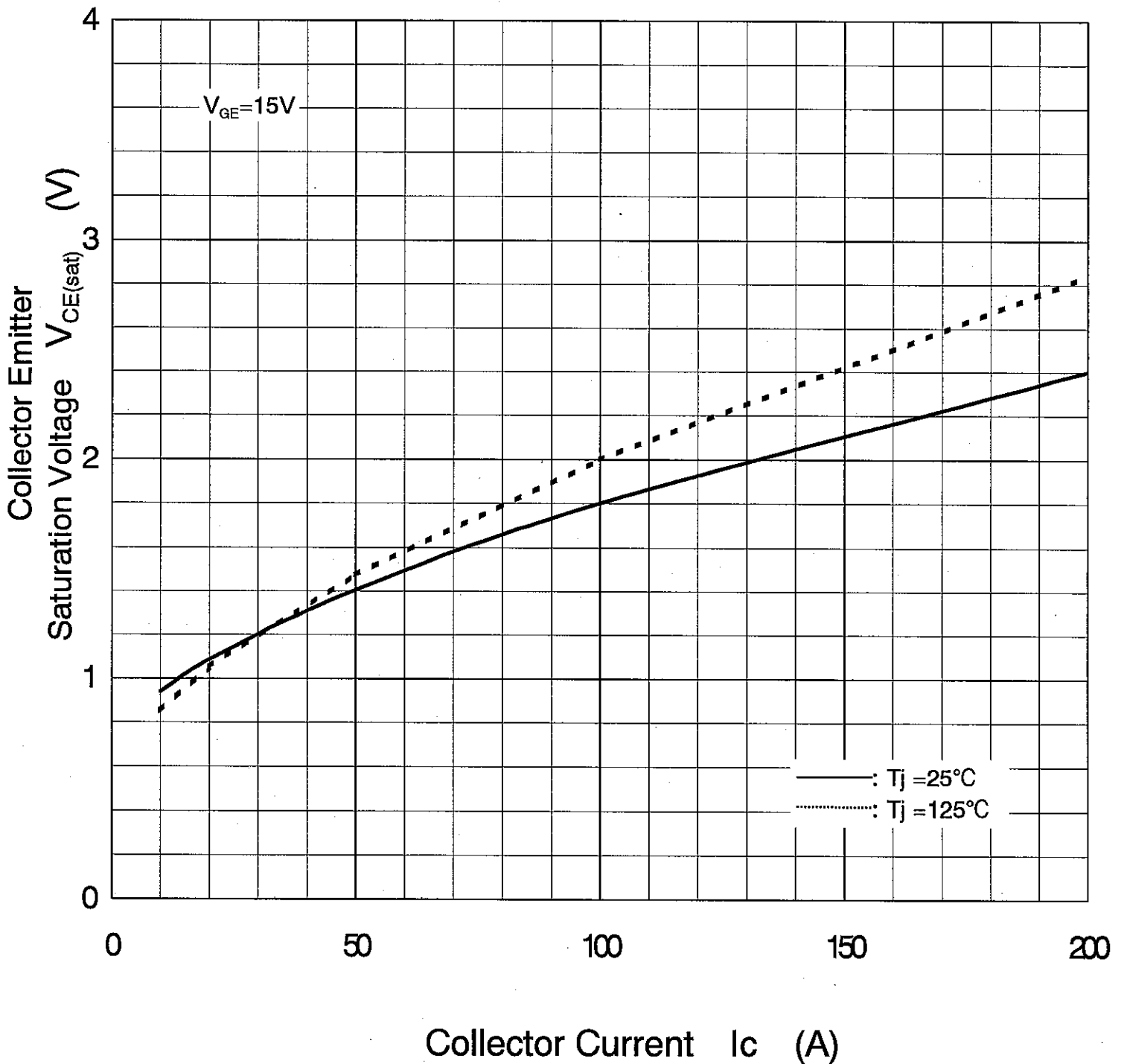
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## Output Characteristics (Typical) CM100DY-24NF



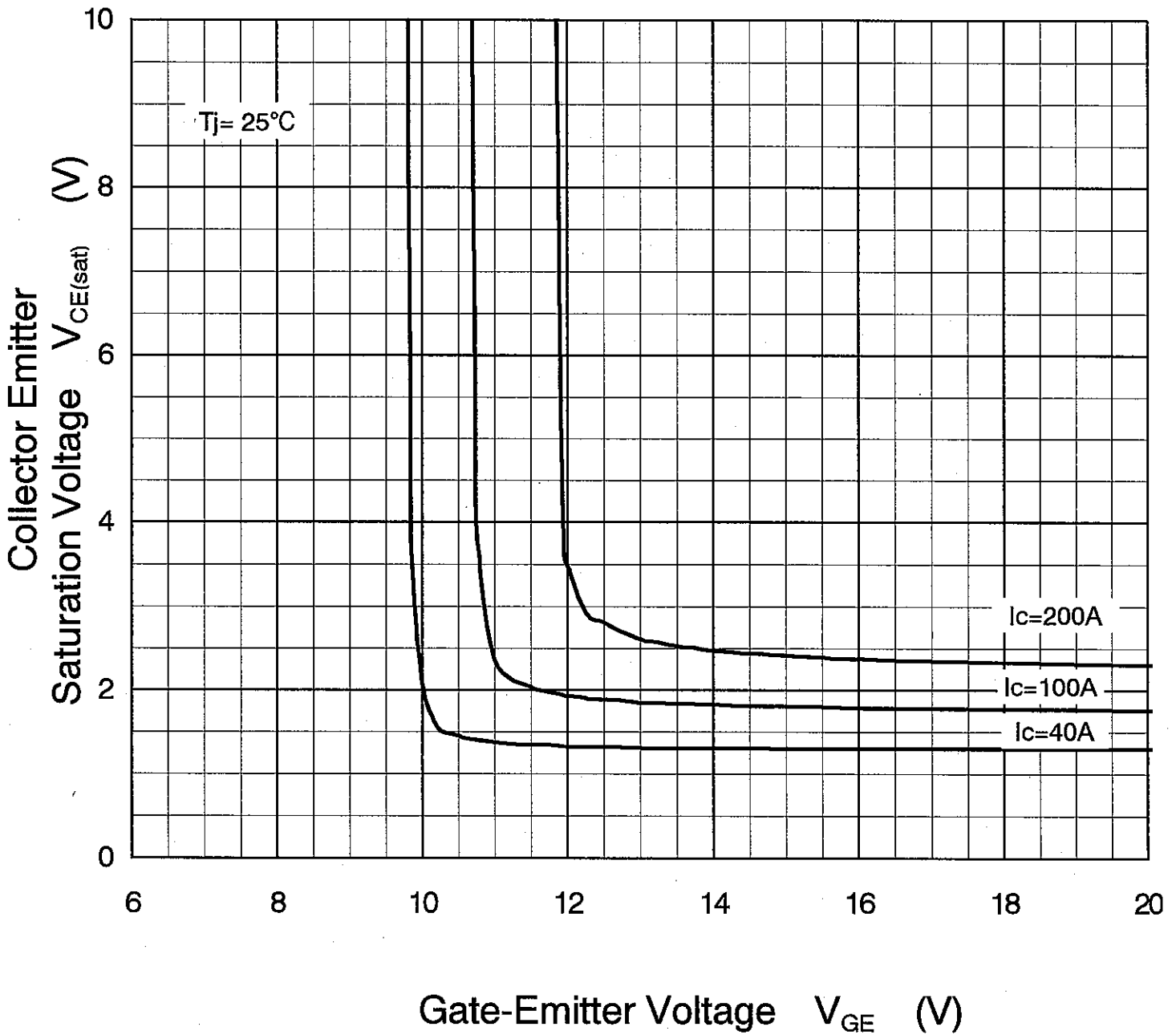
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## Collector-Emitter Saturation Voltage Characteristics (Typical) CM100DY-24NF



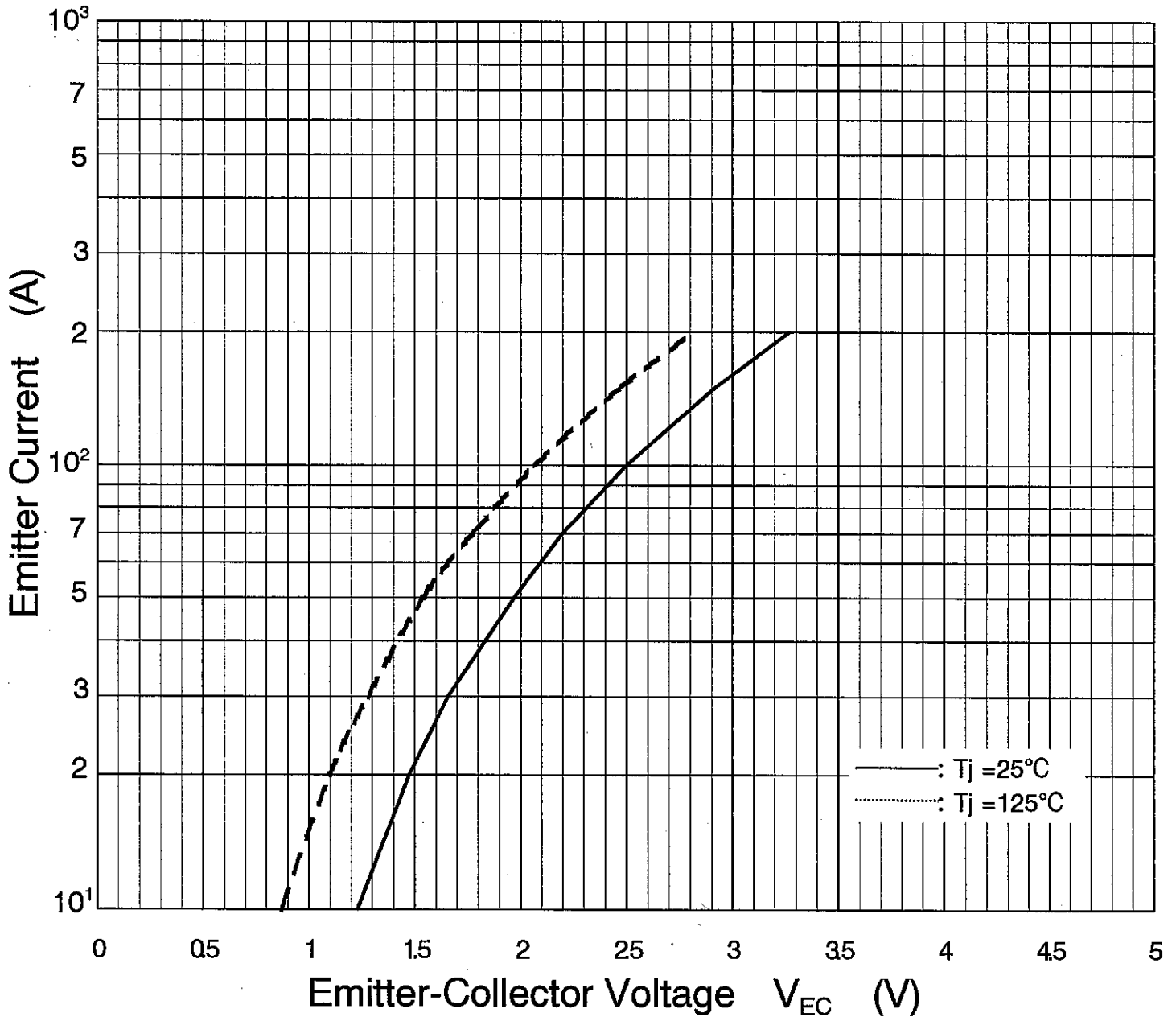
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## Collector-Emitter Saturation Voltage Characteristics (Typical) CM100DY-24NF



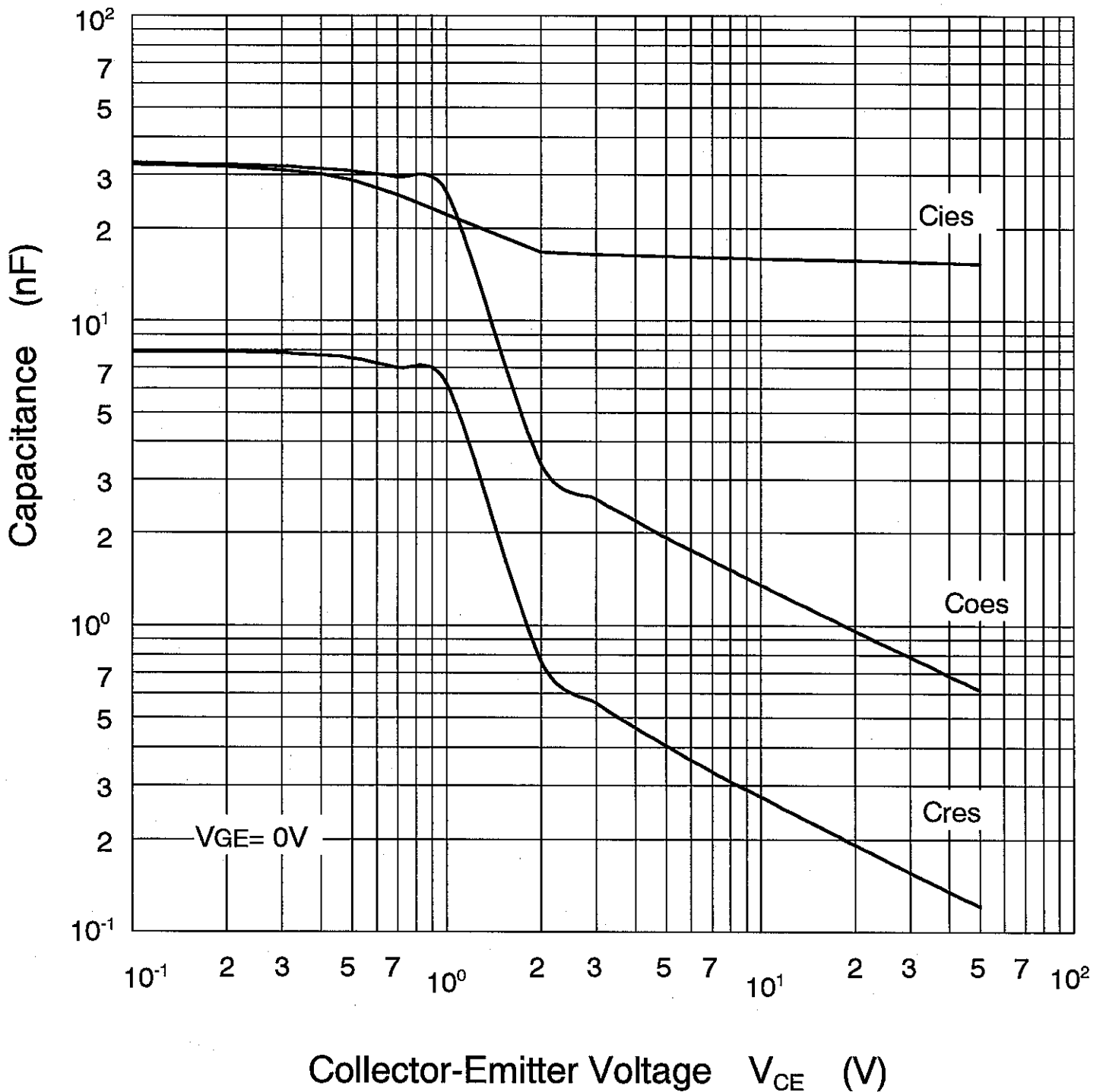
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## Free-Wheel Diode Forward Characteristics (typical) CM100DY-24NF



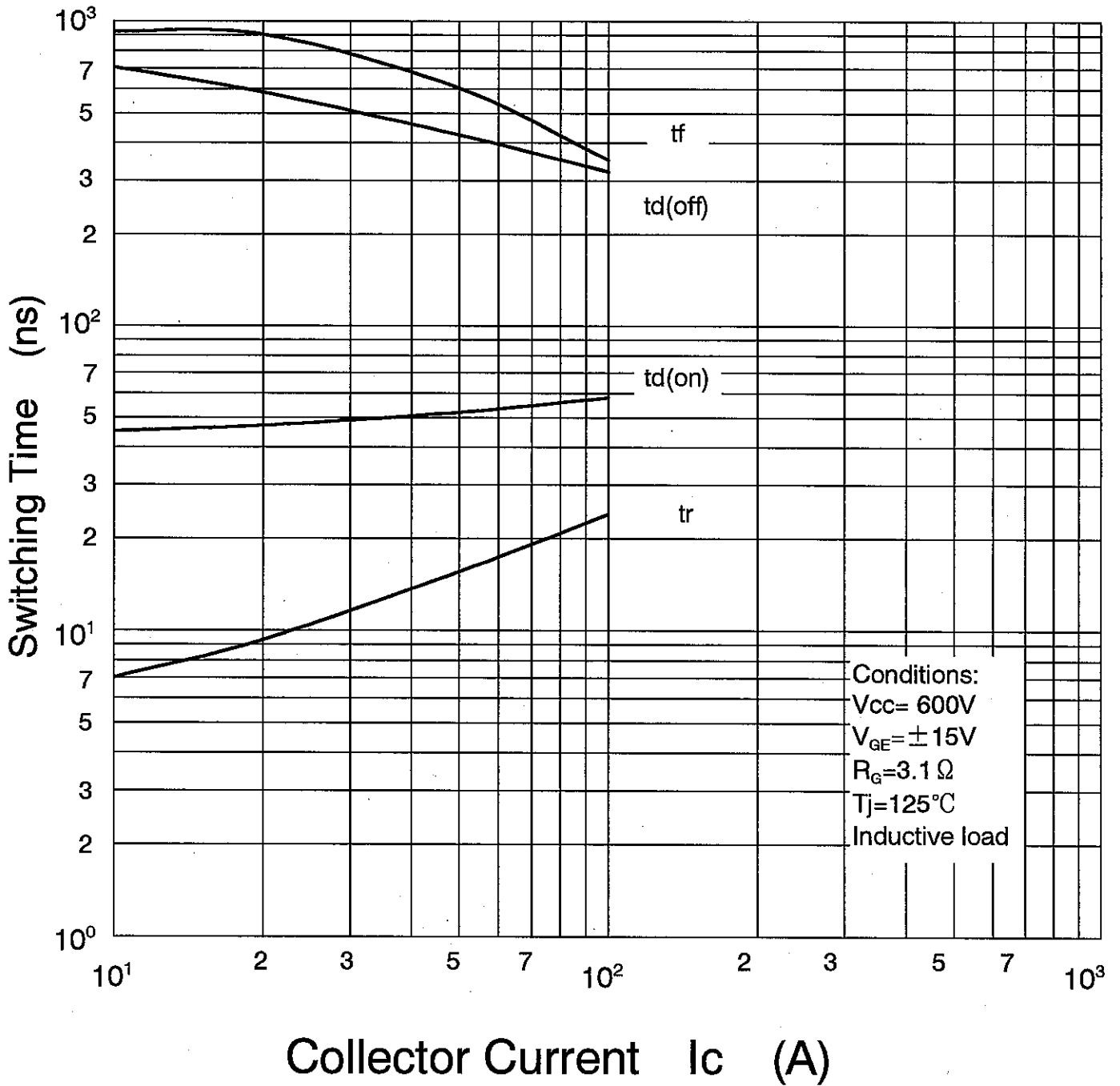
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## Capacitance- $V_{CE}$ Characteristics (typical) CM100DY-24NF



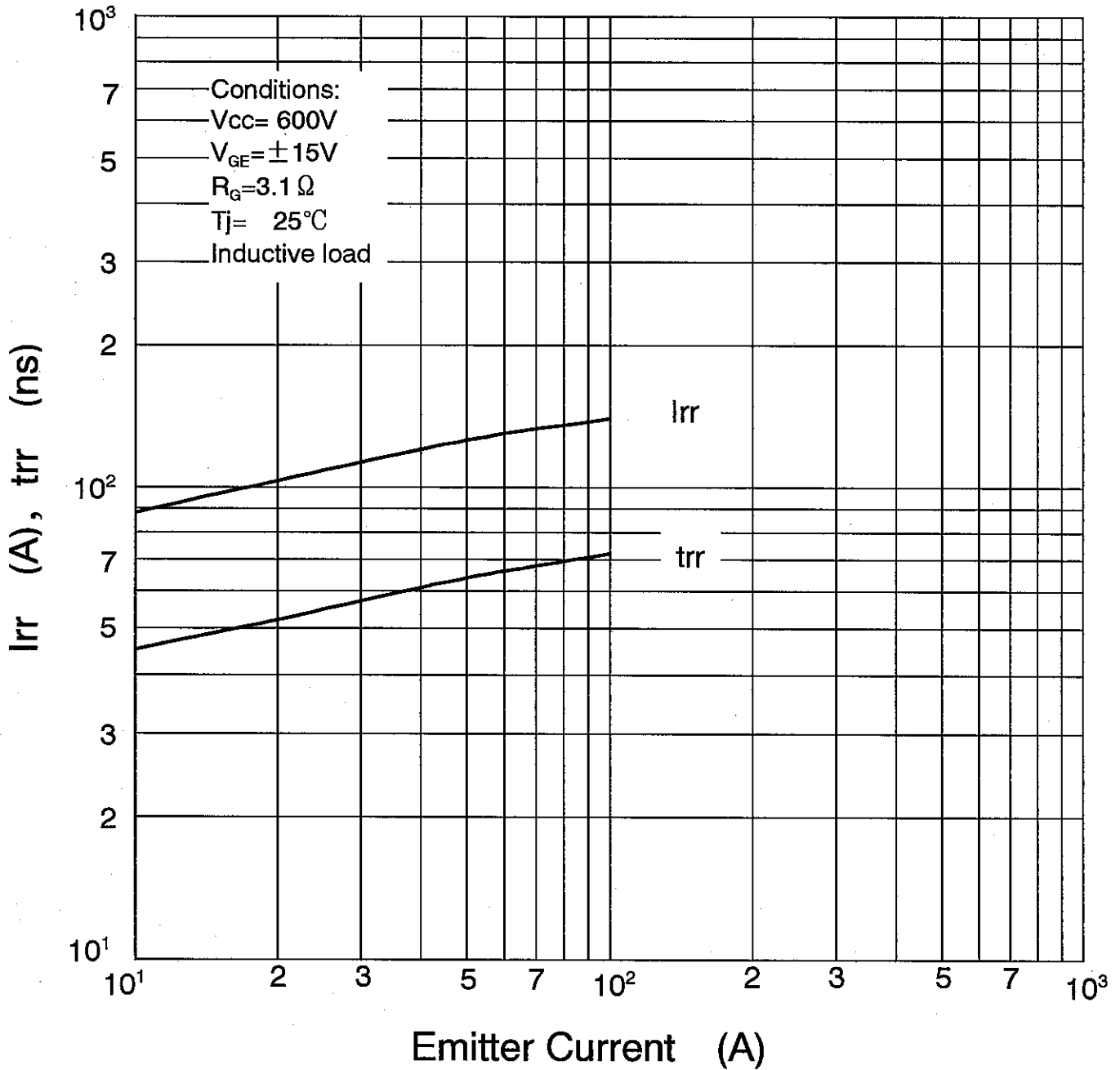
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## Half-Bridge Switching Characteristics (typical) CM100DY-24NF



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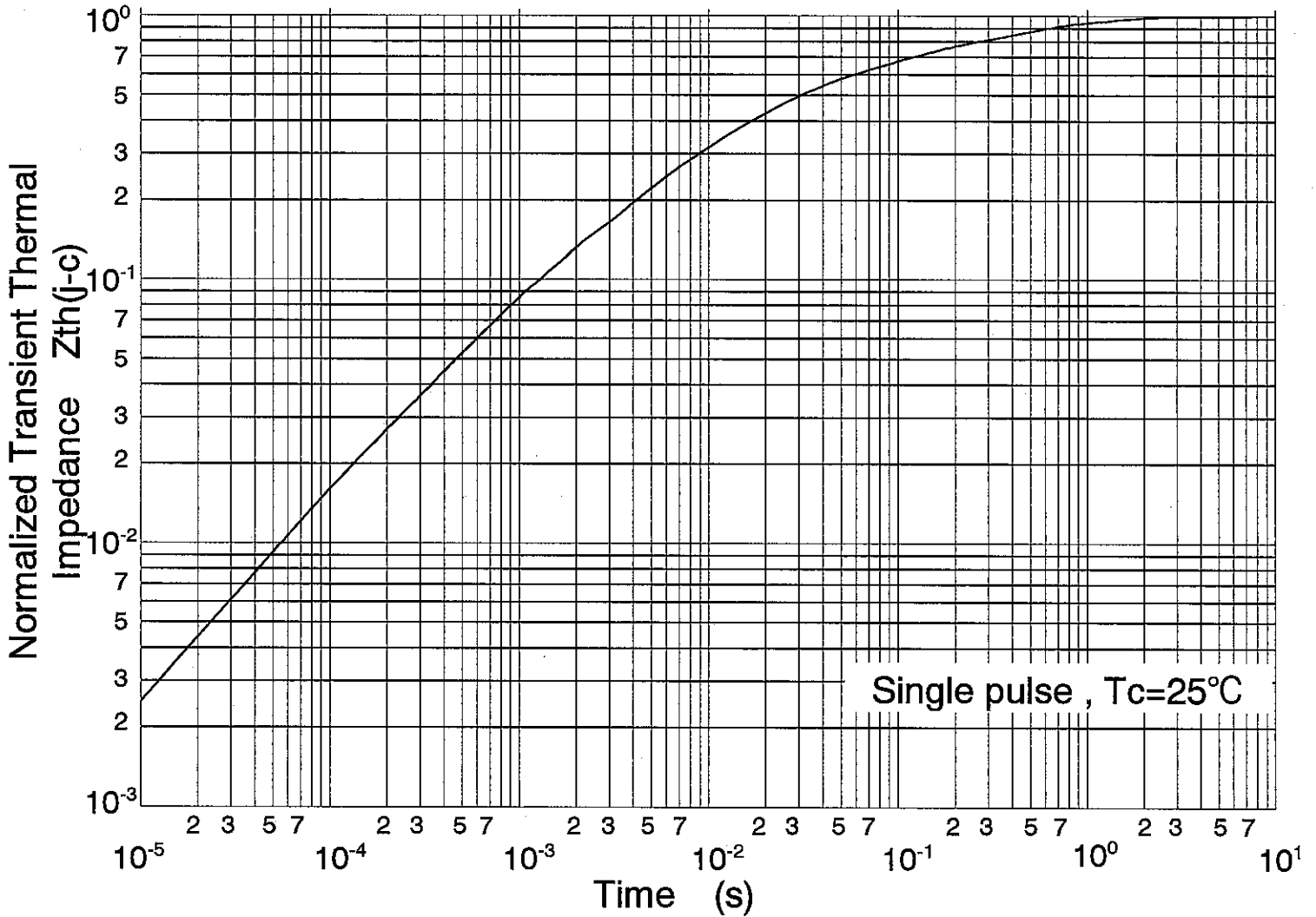
## Reverse Recovery Characteristics of Free-Wheel Diode (typical) CM100DY-24NF





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



IGBT part :

Per unit base= $R_{th(j-c)}=0.19^{\circ}\text{C}/\text{W}$

FWD part :

Per unit base= $R_{th(j-c)}=0.35^{\circ}\text{C}/\text{W}$

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**Gate Charge Characteristics**  
 (typical)  
**CM100DY-24NF**

