

# MITSUBISHI ELECTRIC CORPORATION

APPLICATION NOTE	Prepared by	H.Hanada	Rev	B	H. Hanada.
	Approved by	M.Tabata 1-Apr.-'03			T. Furumai 27-May-'03

CMH5340 b.doc

**Subject** Performance Curves of CM200DY-24A

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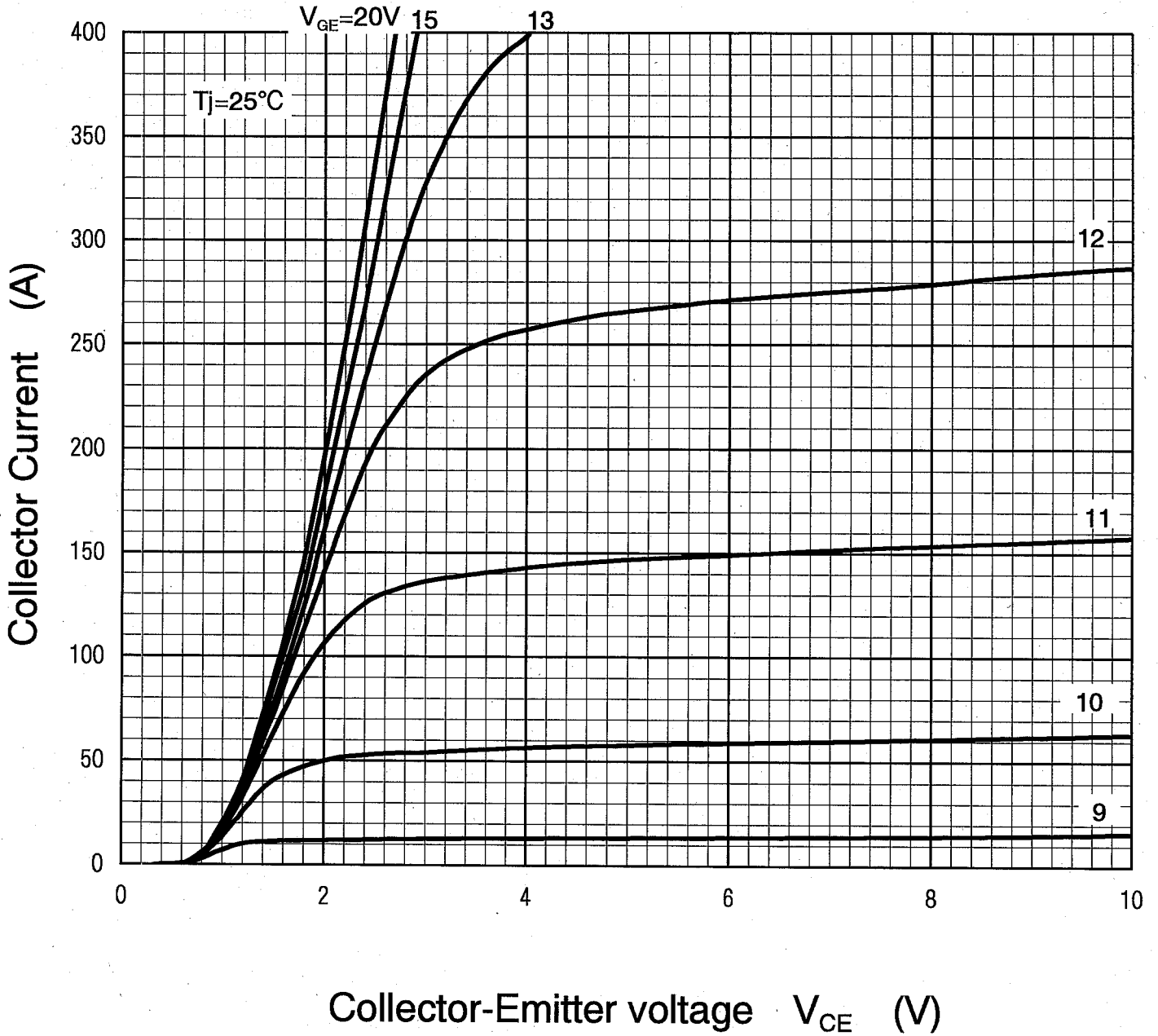
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Don't measure these static characteristics yourself by curve tracer.  
 Usually, curve tracer has too much wiring inductance and device will be damaged by over voltage from oscillation.

IGBT Module	CMH-5340-B	APPLICATION NOTE
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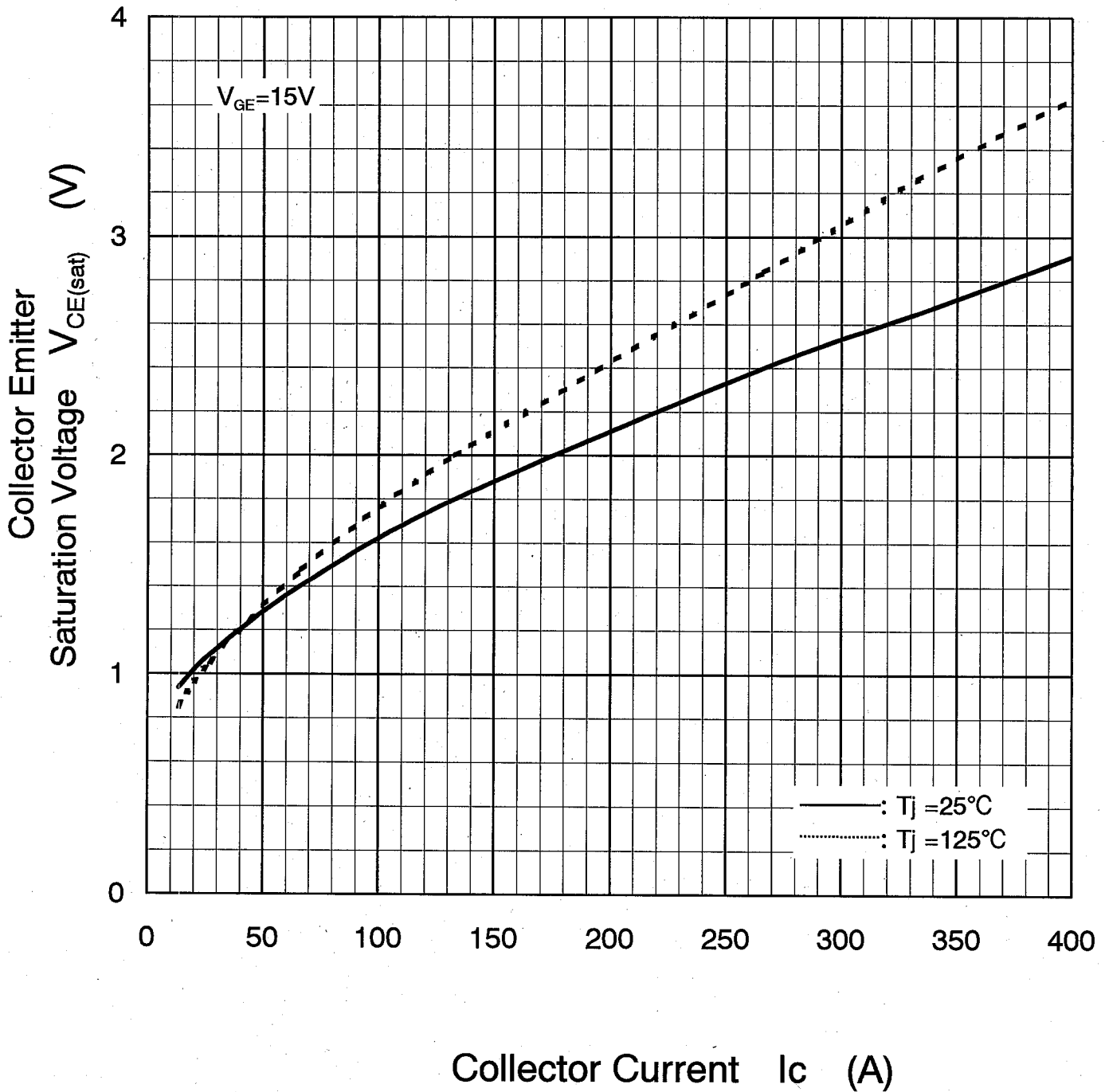
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## Output Characteristics (Typical) CM200DY-24A



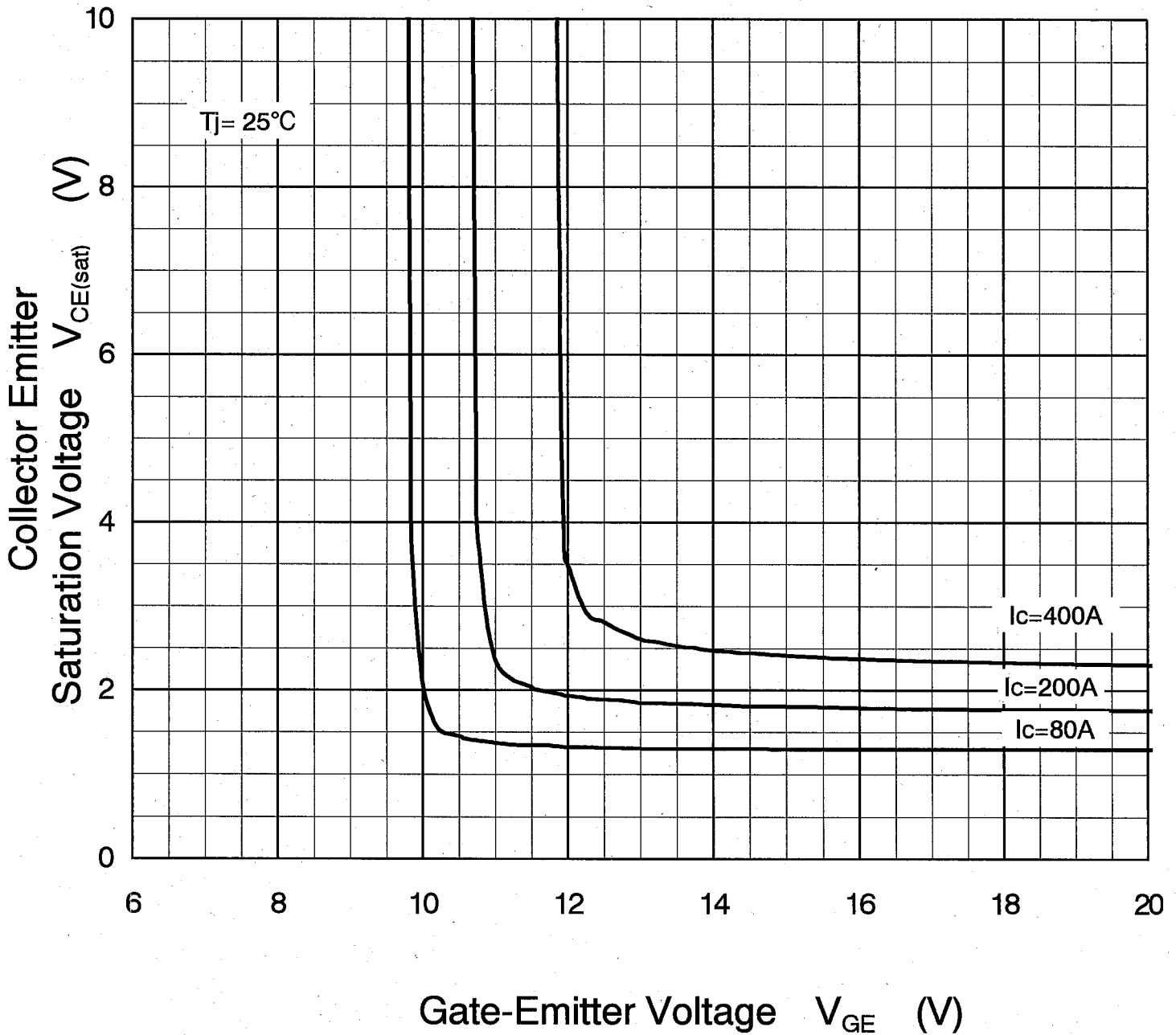
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## Collector-Emitter Saturation Voltage Characteristics (Typical) CM200DY-24A



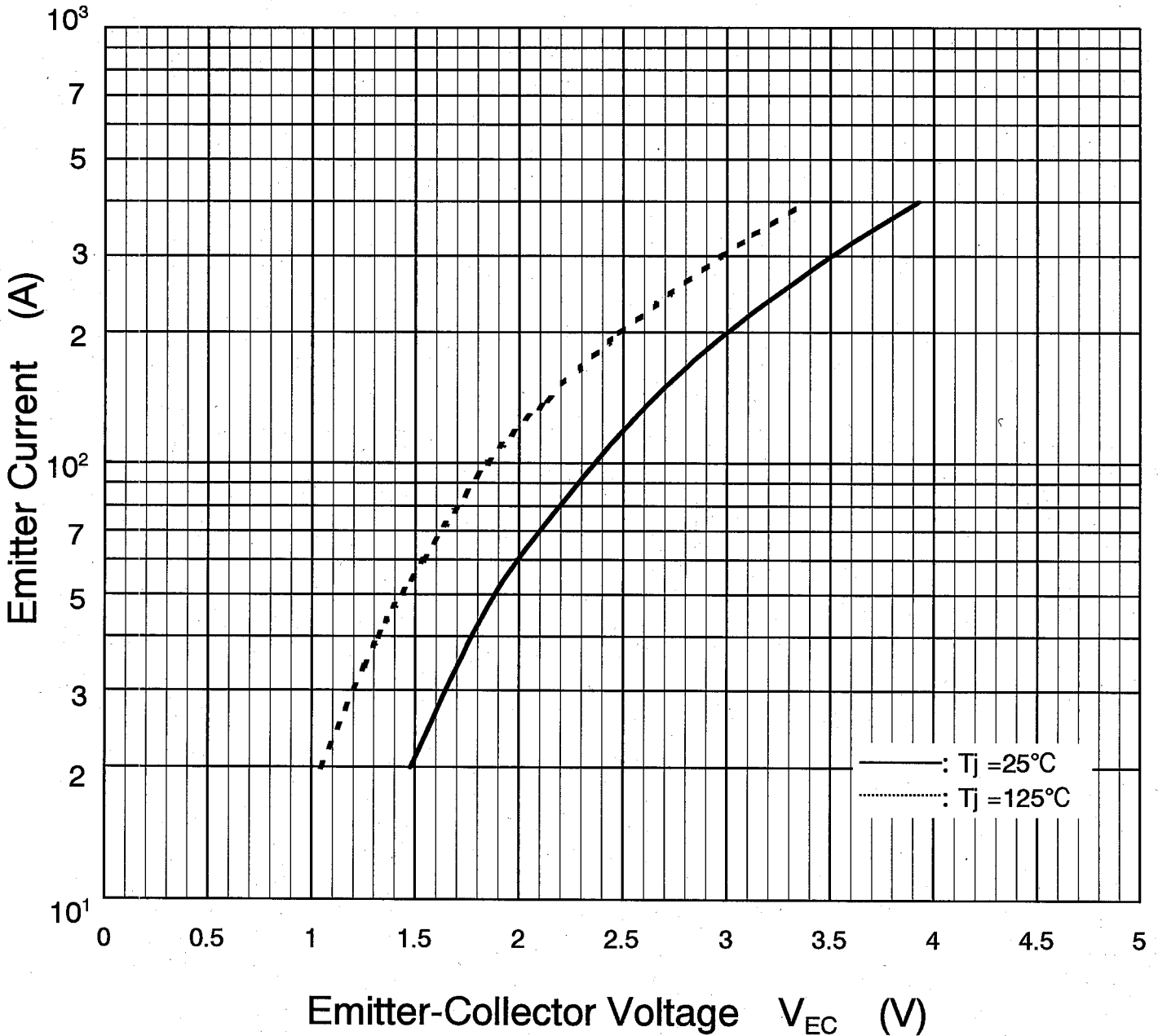
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## Collector-Emitter Saturation Voltage Characteristics (Typical) CM200DY-24A



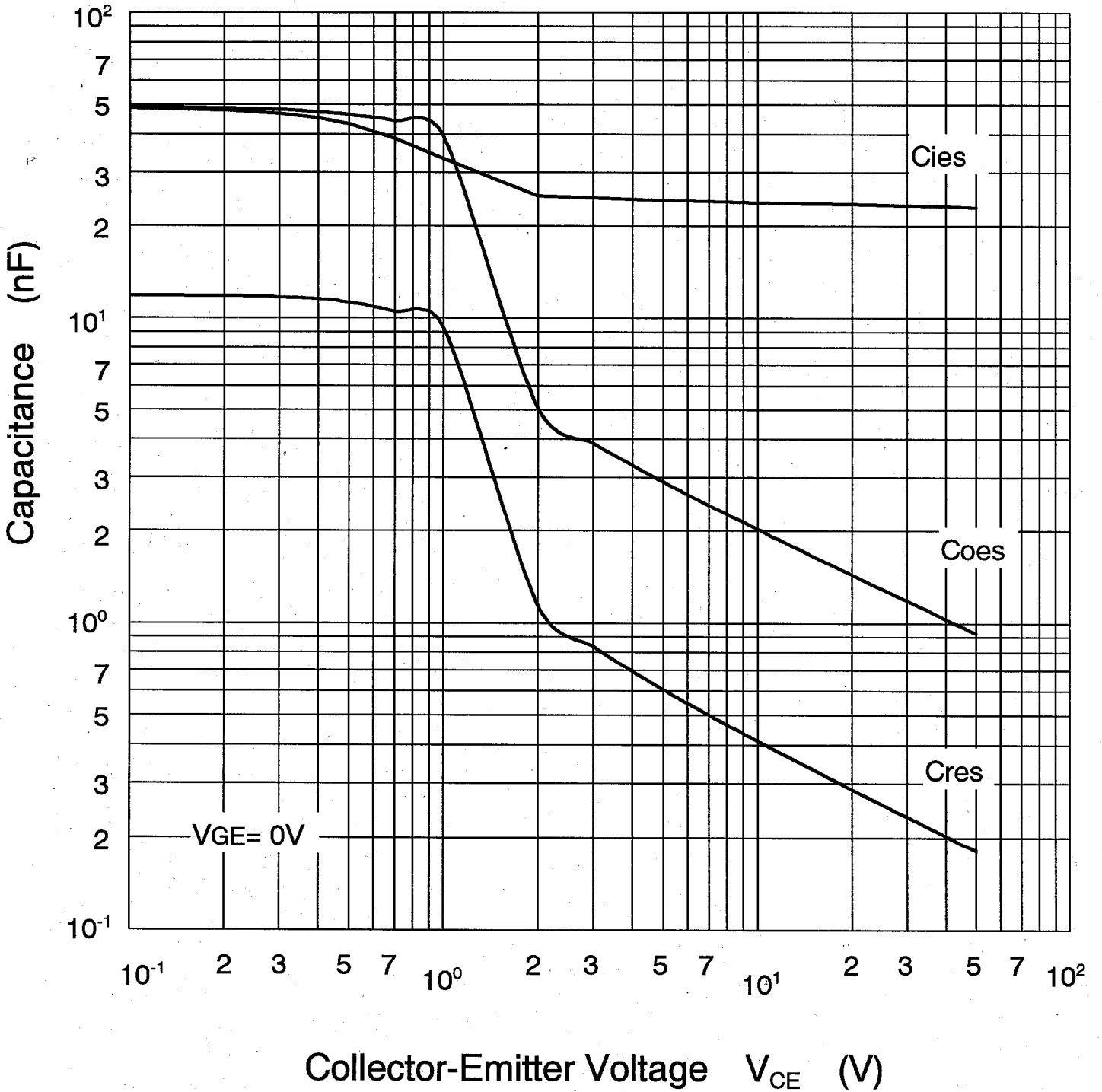
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## Free-Wheel Diode Forward Characteristics (typical) CM200DY-24A



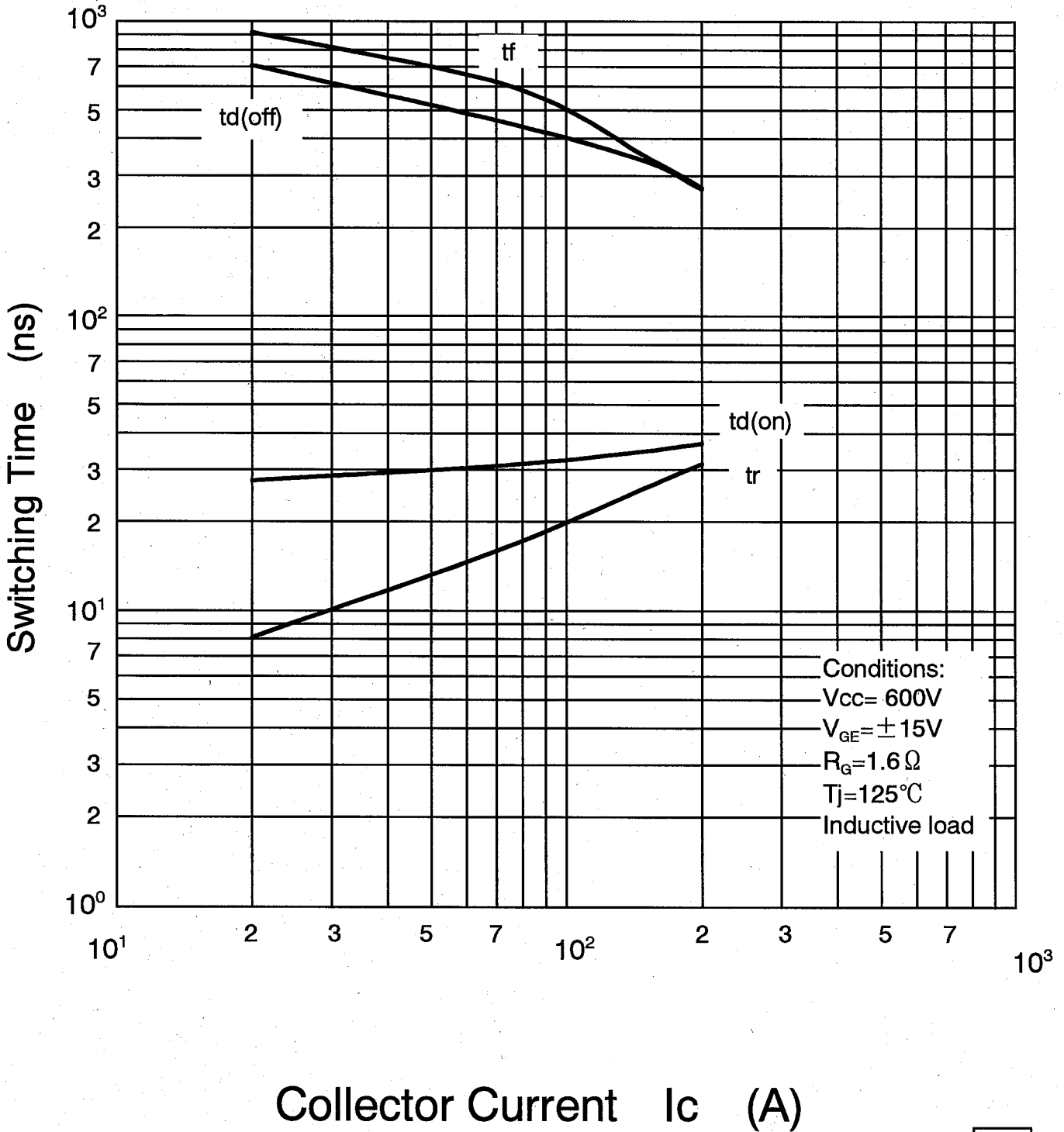
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Capacitance- $V_{CE}$  Characteristics  
(typical)  
CM200DY-24A



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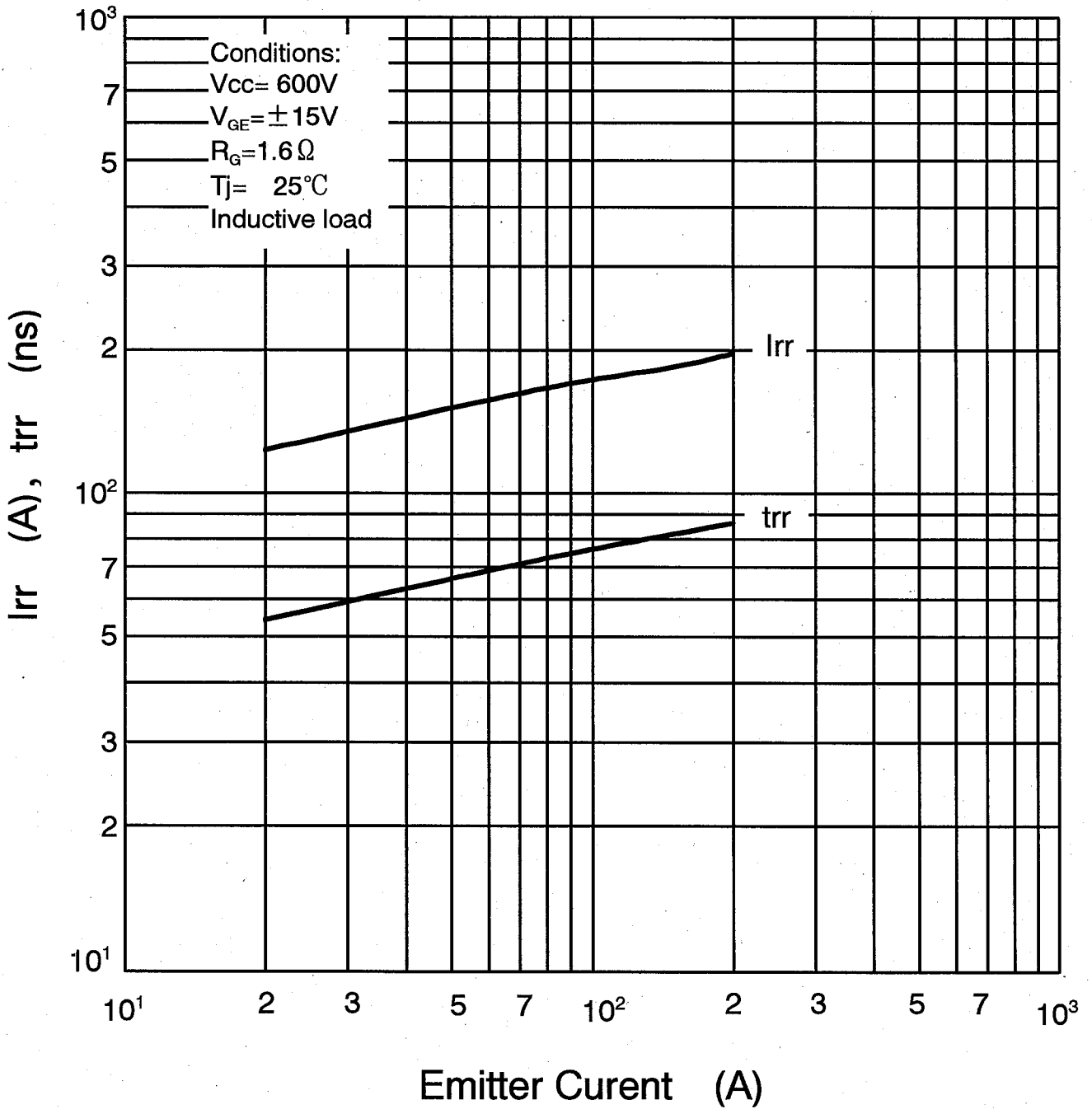
## Half-Bridge Switching Characteristics (typical) CM200DY-24A



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## Reverse Recovery Characteristics of Free-Wheel Diode (typical) CM200DY-24A

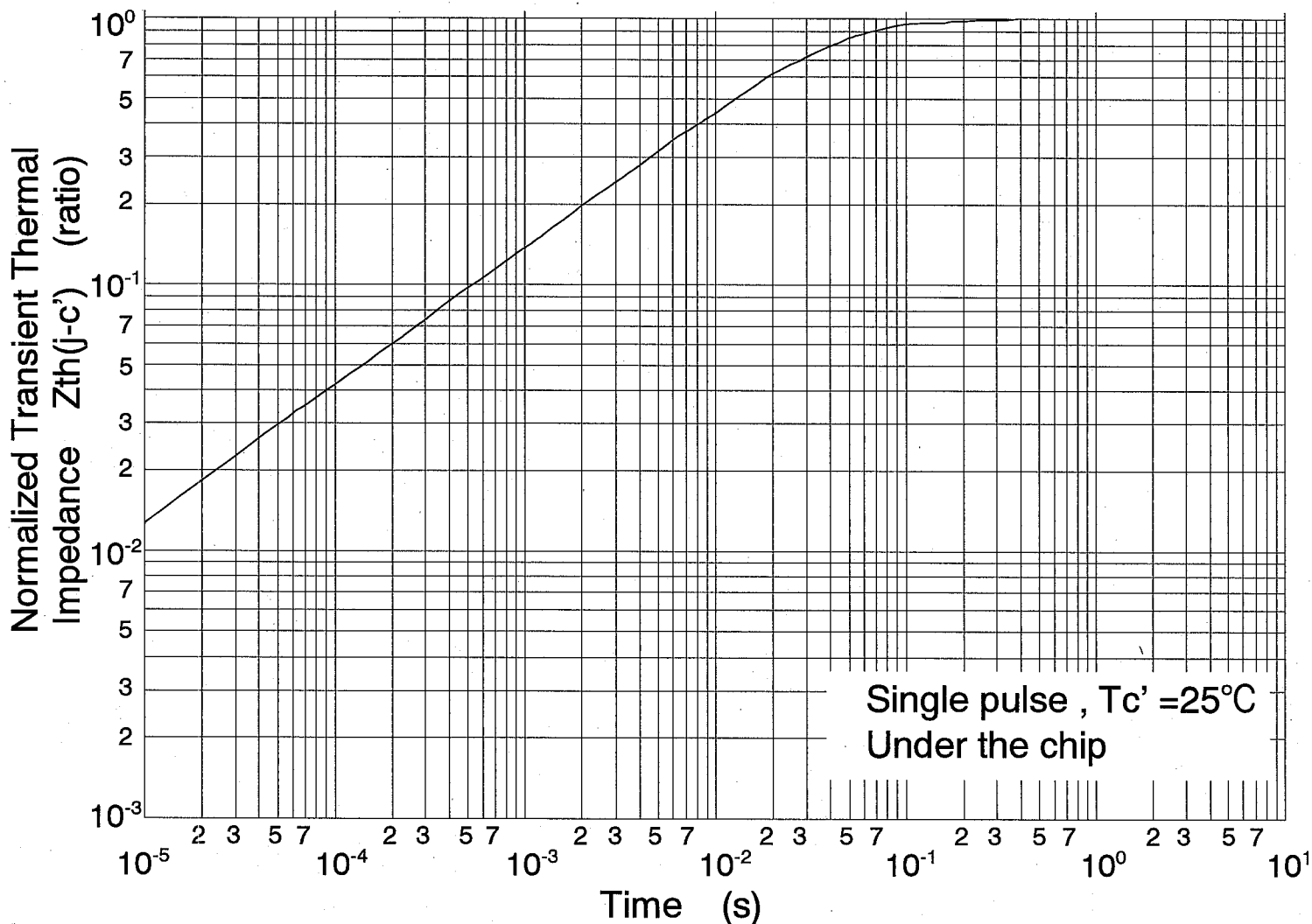


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## Transient Thermal Impedance Characteristics (IGBT part & FWD part) CM200DY-24A



IGBT part :

Per unit base= $R_{th(j-c)} = 0.093^{\circ}\text{C/W}$

FWD part :

Per unit base= $R_{th(j-c)} = 0.17^{\circ}\text{C/W}$

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## Gate Charge Characteristics (typical) CM200DY-24A

