

MITSUBISHI ELECTRIC CORPORATION

APPLICATION NOTE	Prepared by	<i>M. Kouzou</i>		
	Approved by	<i>M. Tabata 7-May-03</i>		

CMH5385.doc

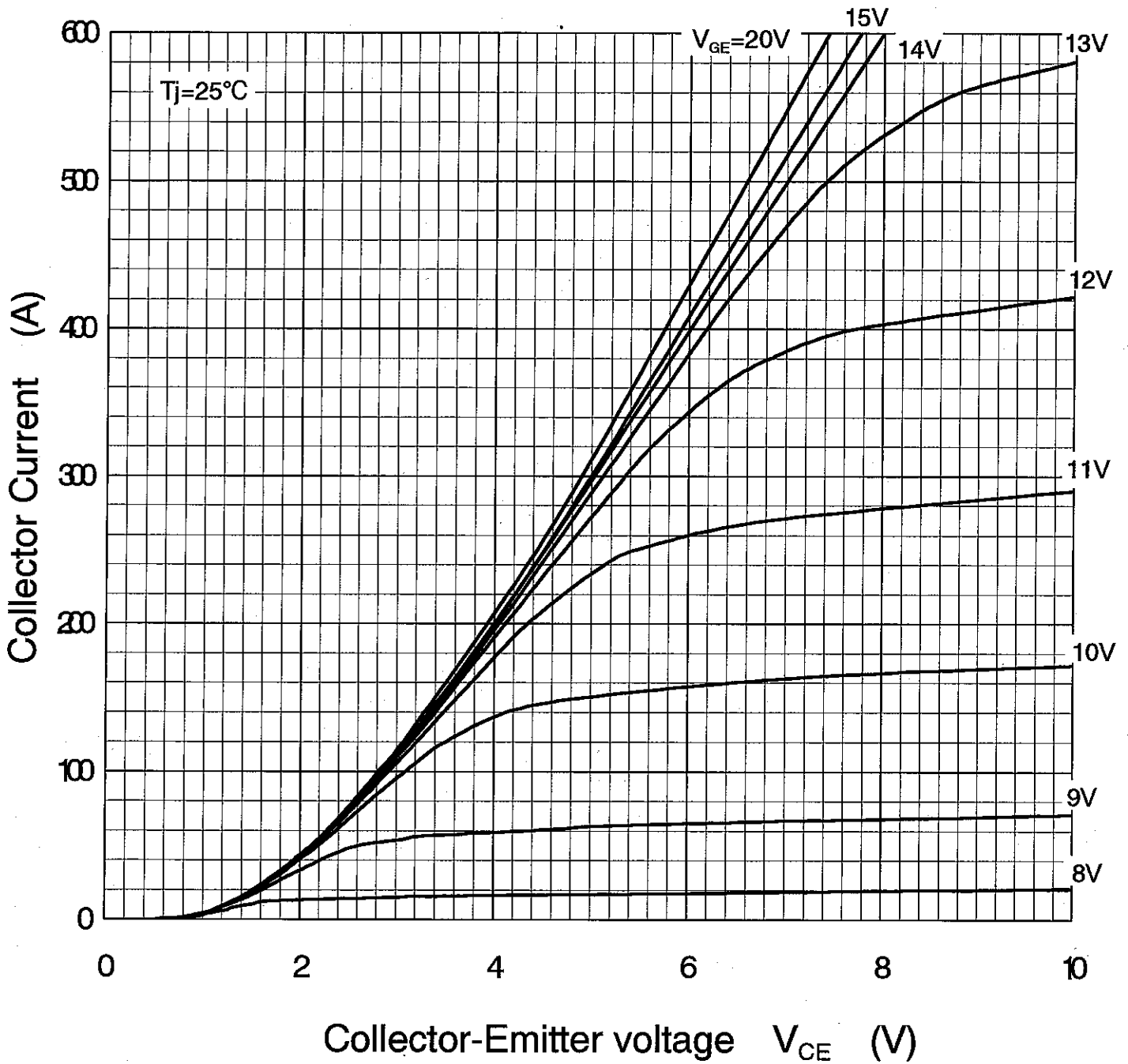
Subject Performance Curves of CM300DU-24NFH
(Tentative)

Contents

- Output Characteristics(typical)
- Transfer 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 t vs. I_c (typical)
- Reverse Recovery Characteristics of Free-Wheel(typical)
- Transient Thermal Impedance Characteristics
(IGBT part & FWD part)
- Gate Charge Characteristics(typical)

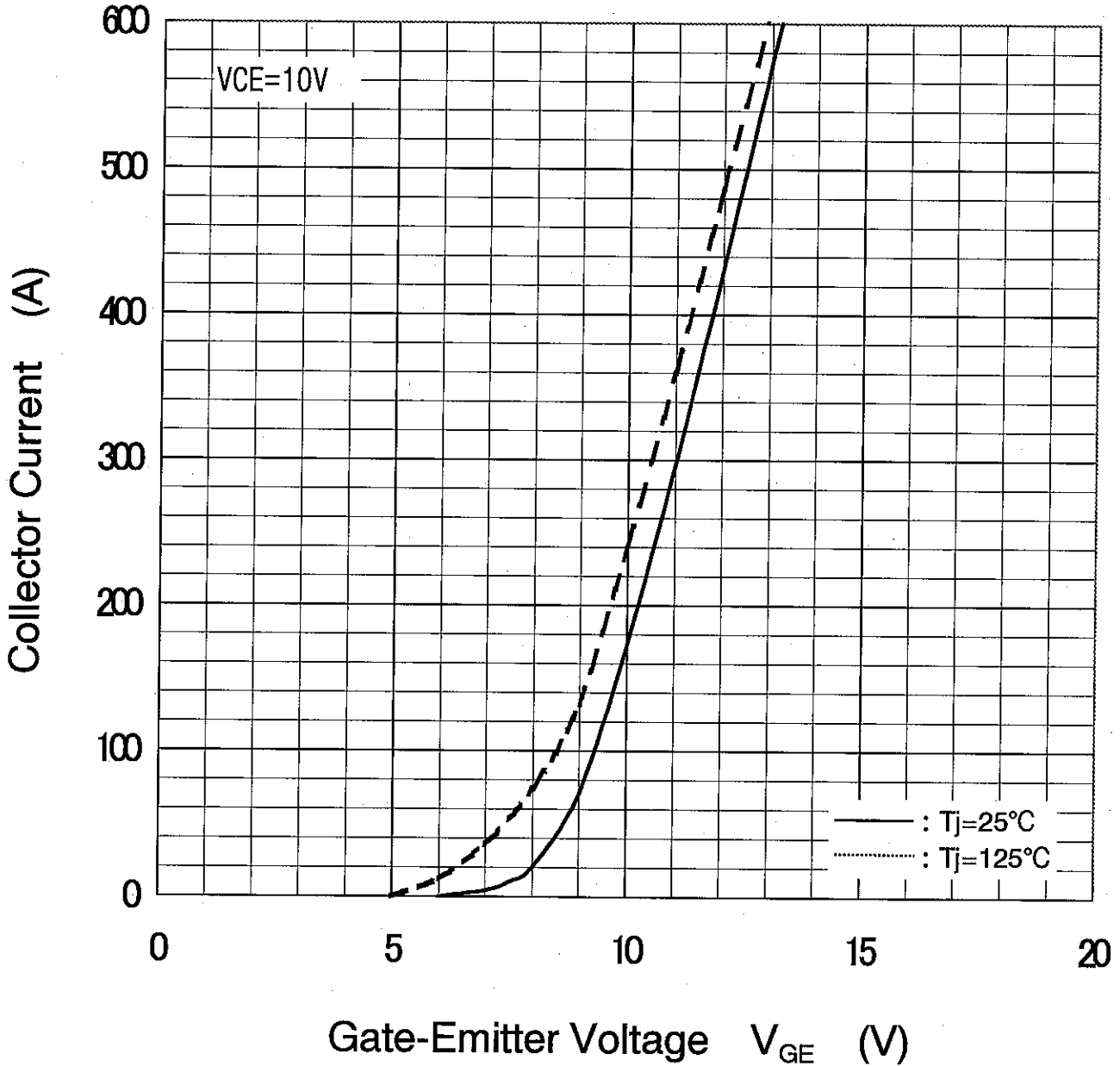
APPLICATION NOTE	Prepared by		Rev	
	Approved by			

Output Characteristics CM300DU-24NFH (Typical)



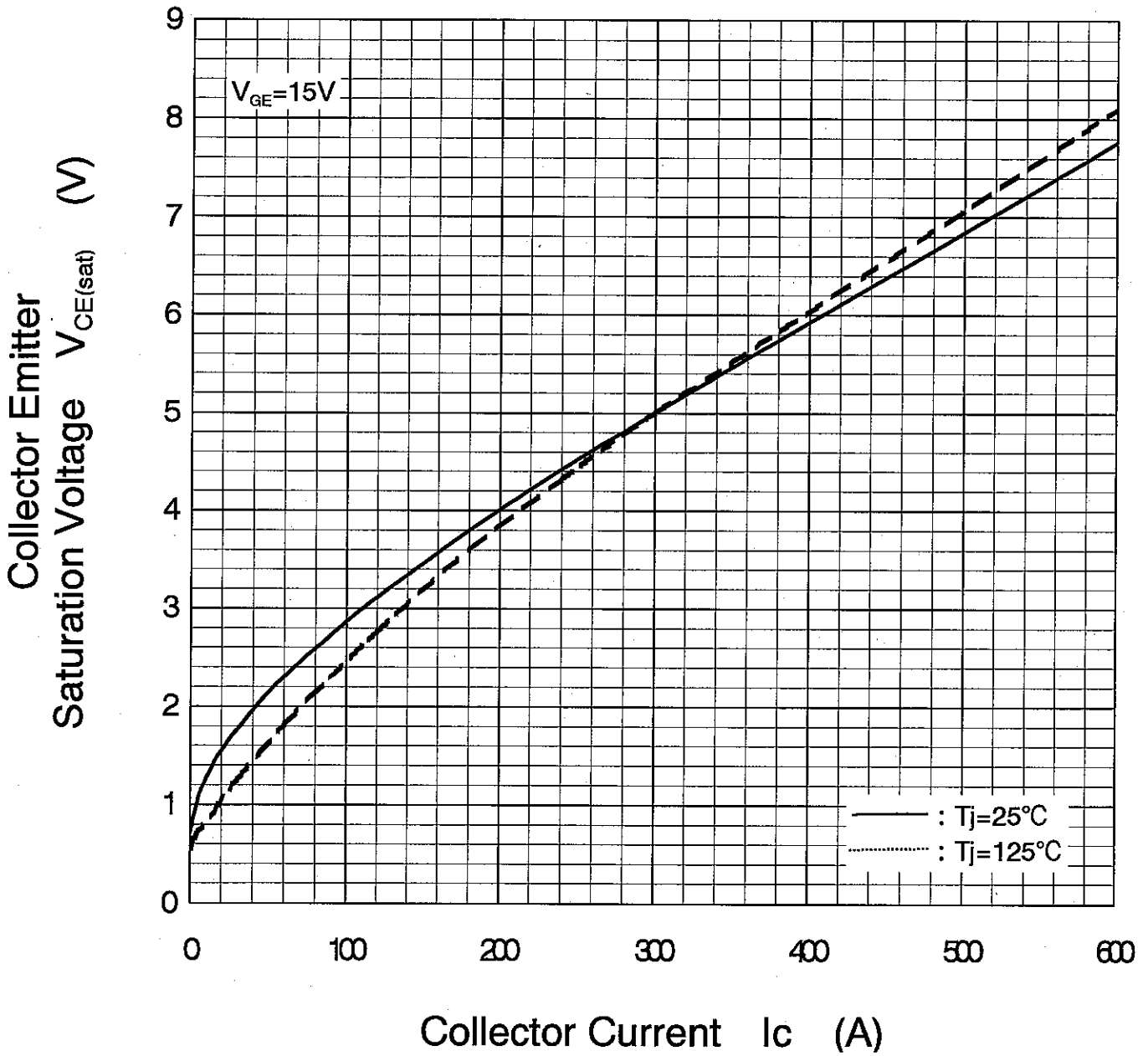
APPLICATION NOTE	Prepared by		Rev	
	Approved by			

Transfer Characteristics CM300DU-24NFH (Typical)



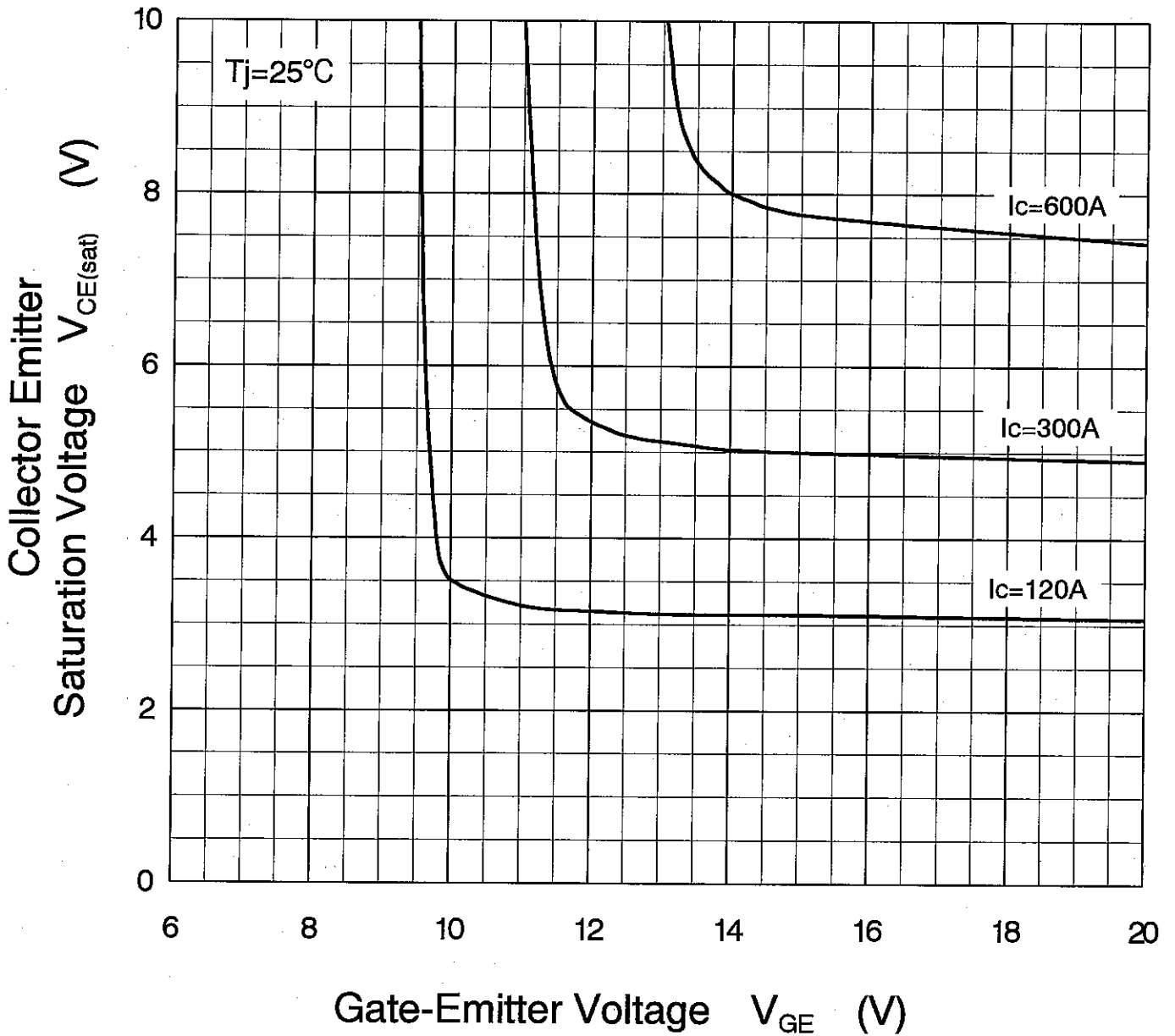
APPLICATION NOTE	Prepared by		Rev	
	Approved by			

Collector-Emitter Saturation Voltage Characteristics CM300DU-24NFH (Typical)



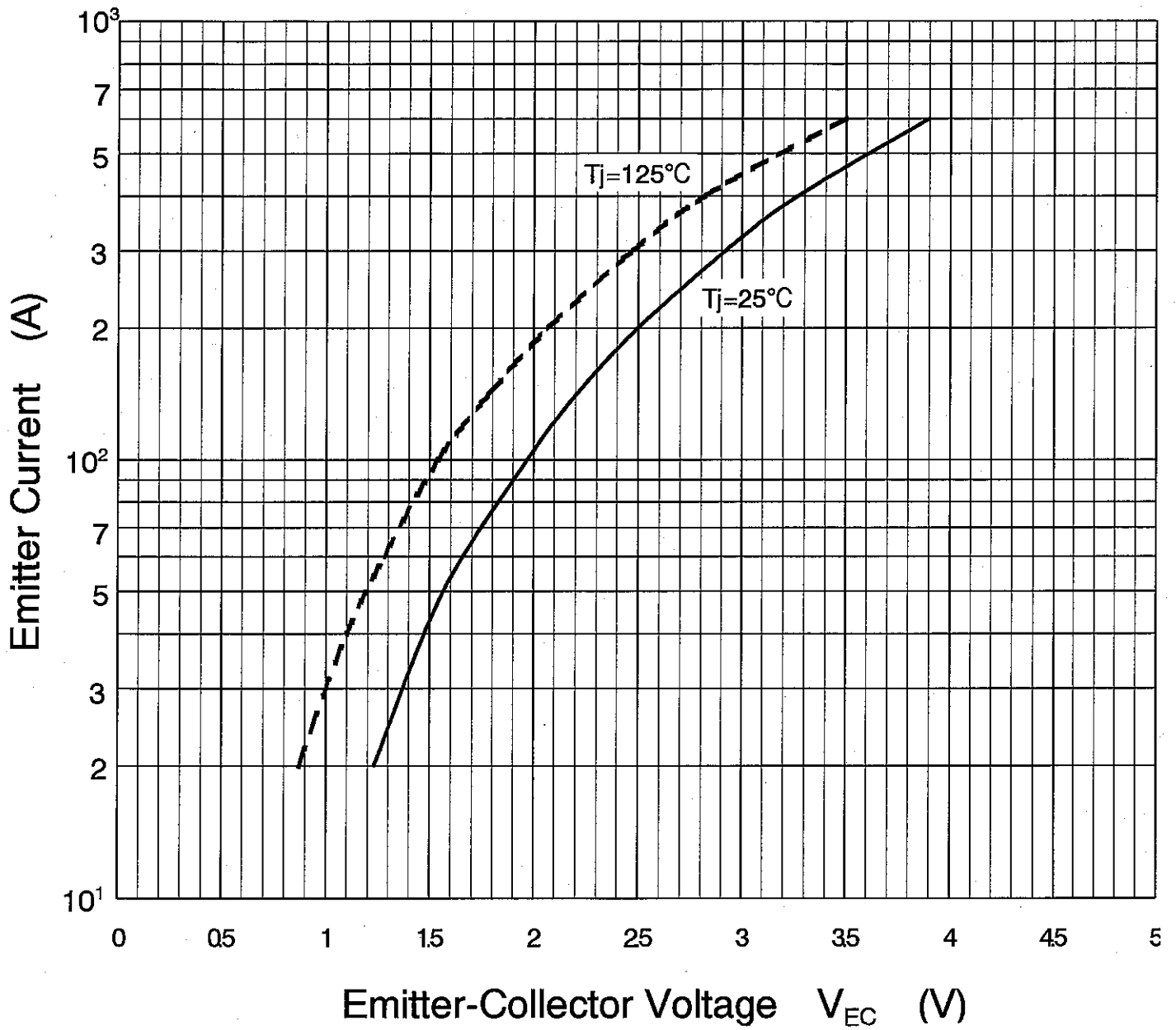
APPLICATION NOTE	Prepared by		Rev	
	Approved by			

Collector-Emitter Saturation Voltage Characteristics CM300DU-24NFH (Typical)



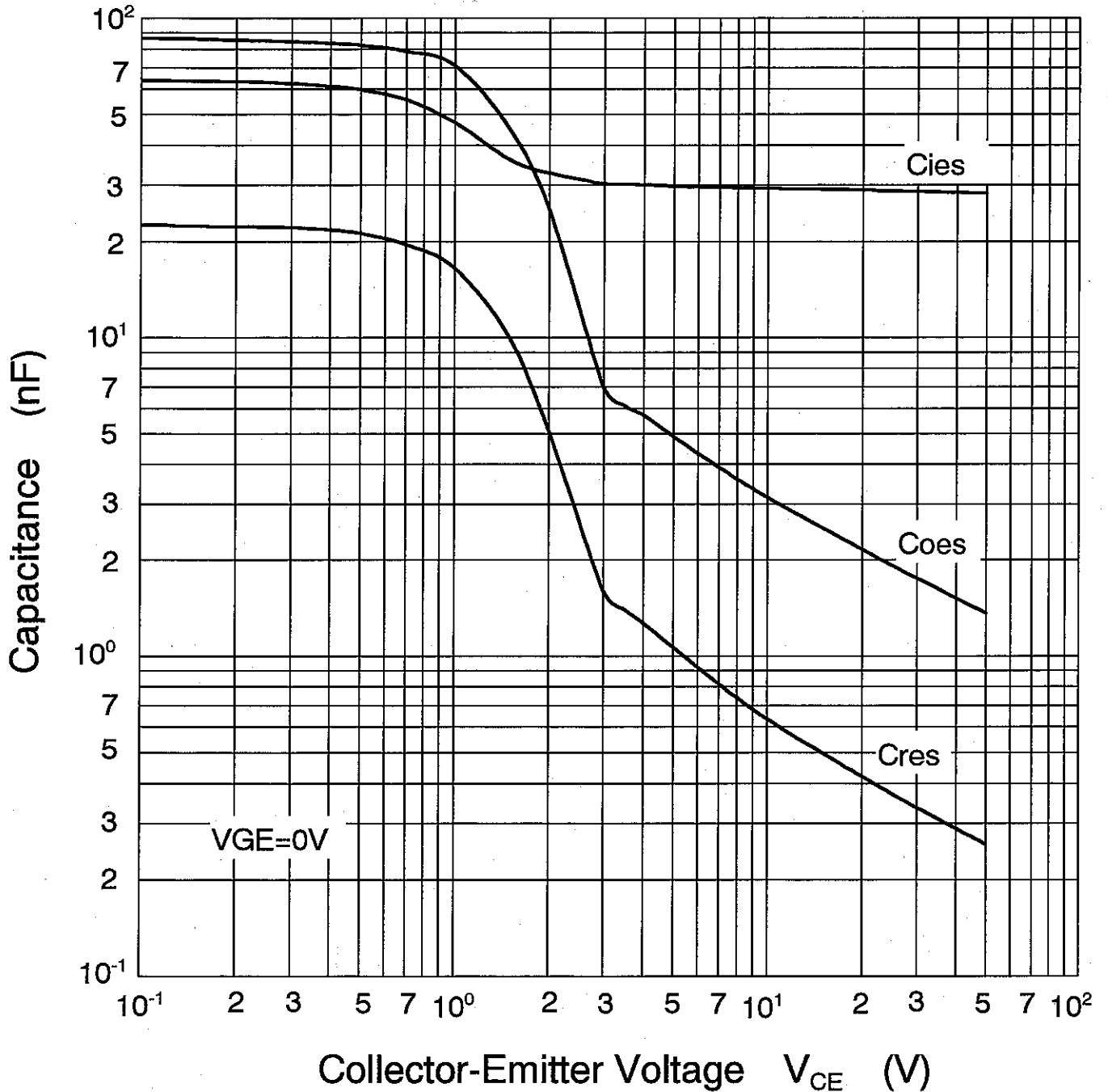
APPLICATION NOTE	Prepared by		Rev	
	Approved by			

Free-Wheel Diode Forward Characteristics CM300DU-24NFH (typical)



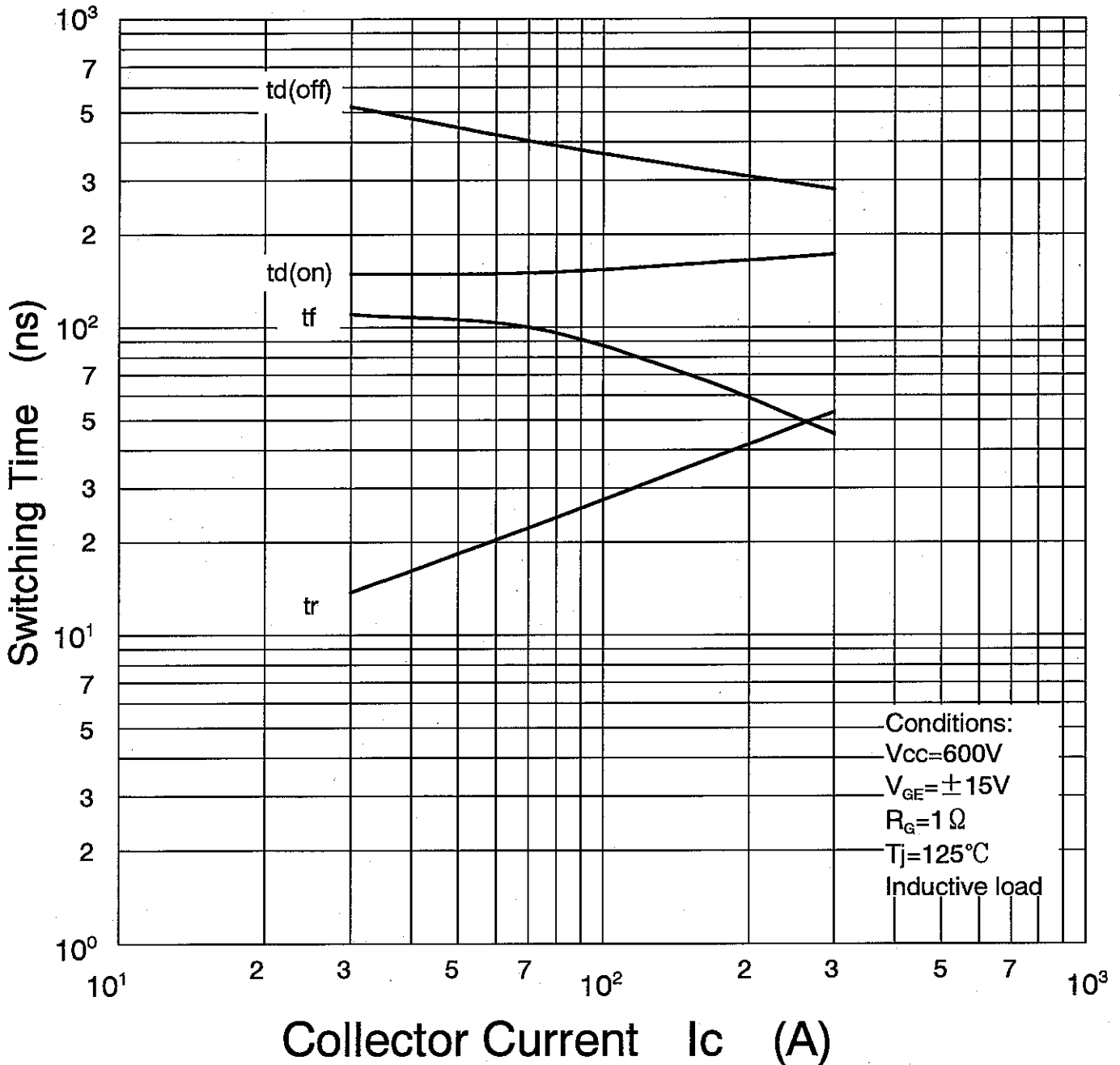
APPLICATION NOTE	Prepared by		Rev	
	Approved by			

Capacitance- V_{CE} Characteristics CM300DU-24NFH (typical)



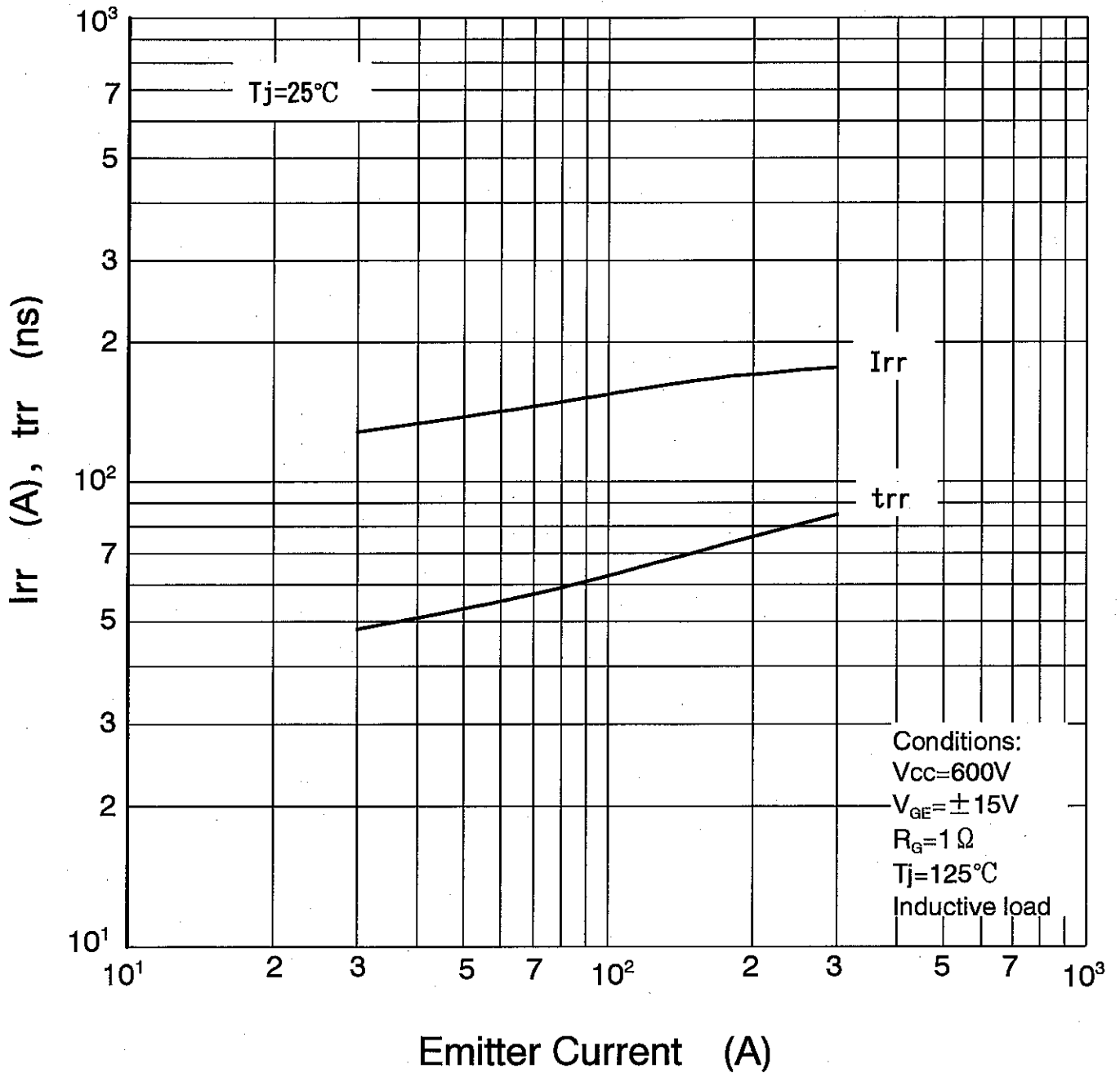
APPLICATION NOTE	Prepared by		Rev	
	Approved by			

Half-Bridge Switching Characteristics CM300DU-24NFH (typical)



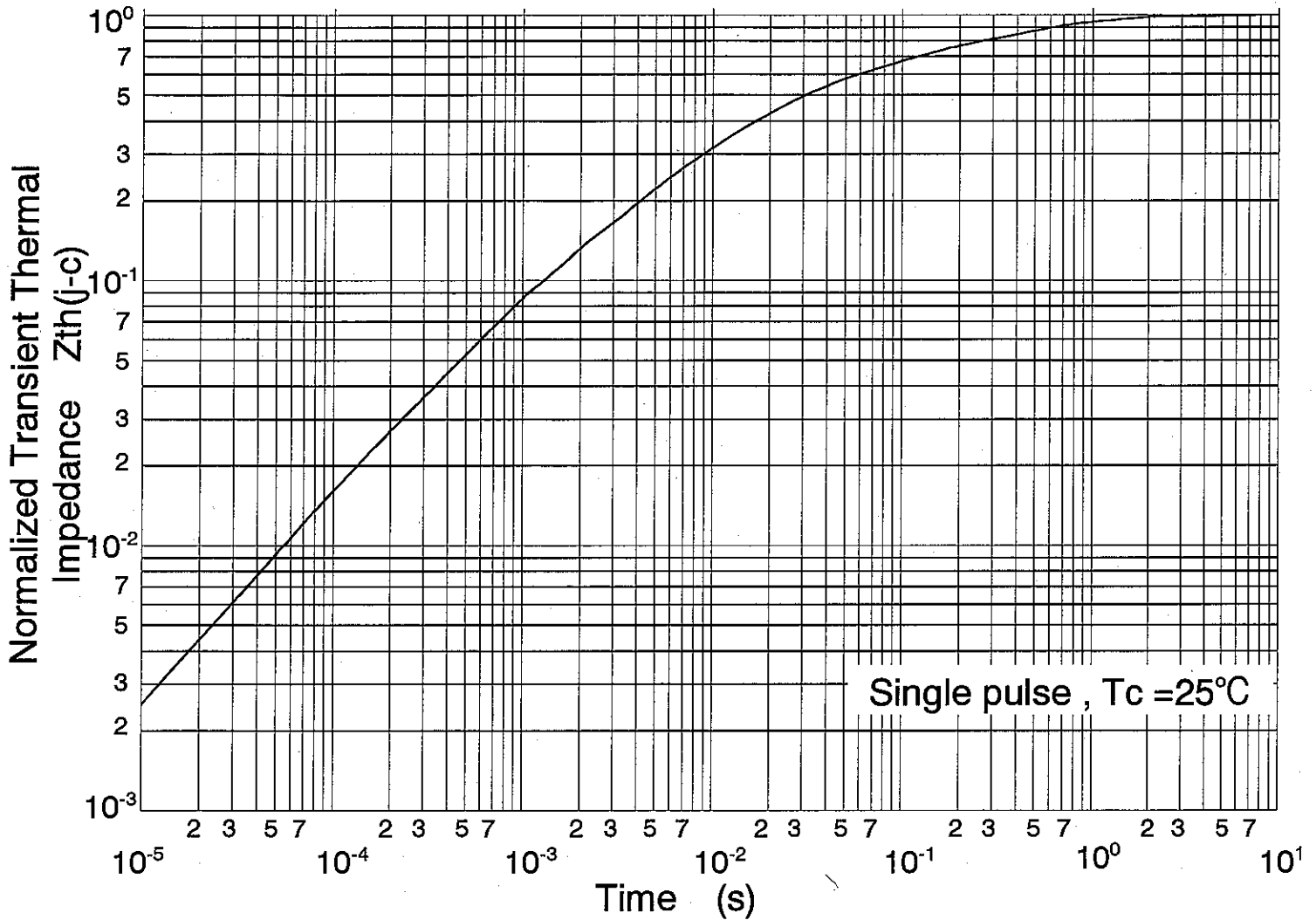
APPLICATION NOTE	Prepared by		Rev	
	Approved by			

Reverse Recovery Characteristics Of Free-Wheel Diode CM300DU-24NFH (typical)



APPLICATION NOTE	Prepared by		Rev	
	Approved by			

Transient Thermal Impedance Characteristics (IGBT part & FWD part) CM300DU-24NFH



IGBT part :

Per unit base = $R_{th(j-c)} = 0.11^{\circ}\text{C/W}$

FWD part :

Per unit base = $R_{th(j-c)} = 0.18^{\circ}\text{C/W}$

APPLICATION NOTE	Prepared by		Rev	
	Approved by			

Gate Charge Characteristics CM300DU-24NFH (typical)

