



THERMAL AND MECHANICAL SPECIFICATIONS						
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
Junction and storage temperature range	$T_J, T_{Stg}$		-40	-	150	°C
Junction to case	IGBT	$R_{thJC}$	-	-	0.20	°C/W
	Diode		-	-	0.33	
Case to heatsink	$R_{thCS}$	Flat, greased surface	-	0.1	-	
Weight			-	30	-	g
Mounting torque		Torque to terminal	-	-	1.1 (9.7)	Nm (lbf.in)
		Torque to heatsink	-	-	1.8 (15.9)	Nm (lbf.in)
Case style			SOT-227			

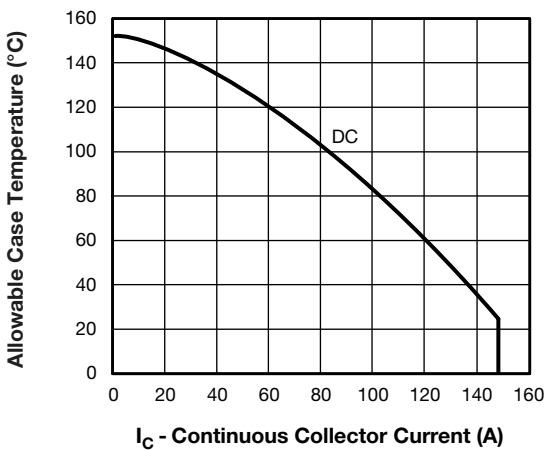


Fig. 1 - Maximum DC IGBT Collector Current vs. Case Temperature

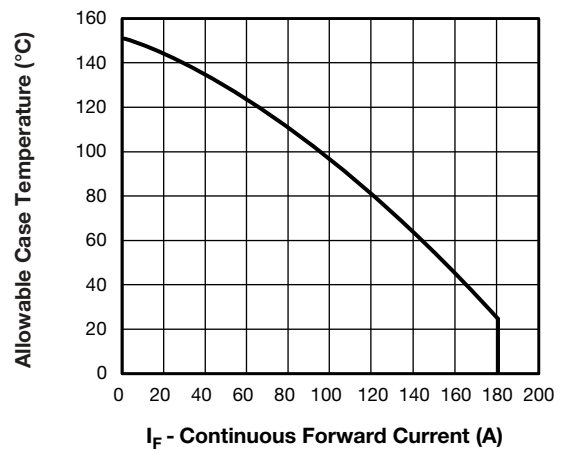


Fig. 3 - Maximum Allowable Forward Current vs. Case Temperature, Diode Leg

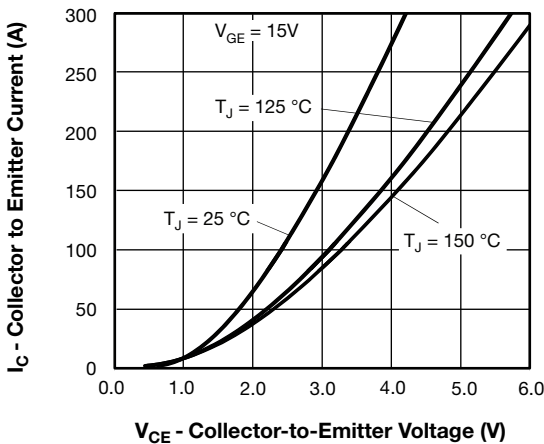


Fig. 2 - Typical Collector to Emitter Voltage (V)

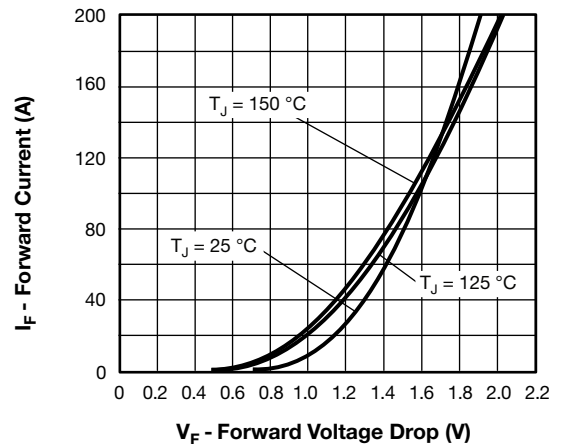


Fig. 4 - Typical Forward Voltage Drop Characteristics

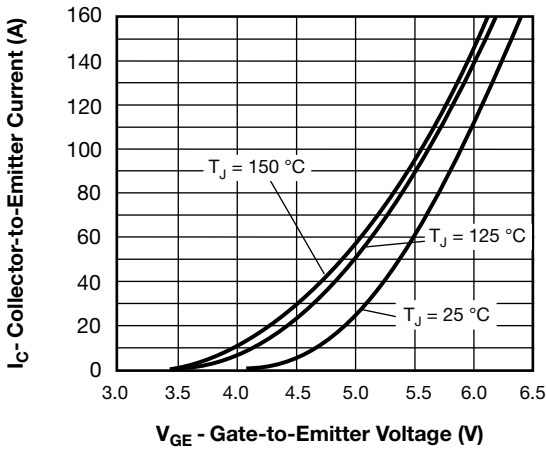


Fig. 5 - Typical IGBT Transfer Characteristics

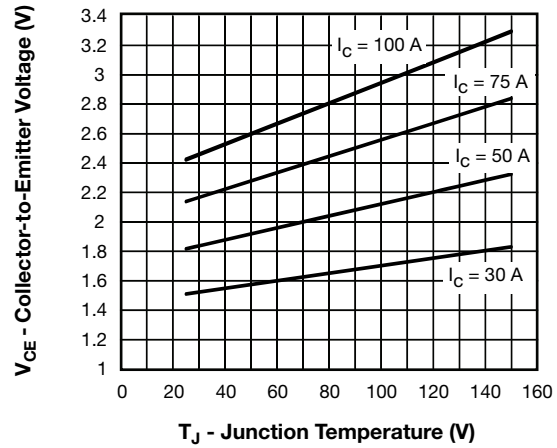


Fig. 8 - Typical IGBT Collector to Emitter Voltage vs. Junction Temperature,  $V_{GE} = 15\text{ V}$

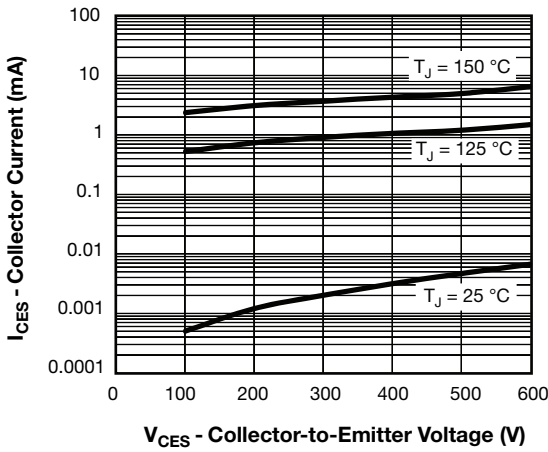


Fig. 6 - Typical IGBT Zero Gate Voltage Collector Current

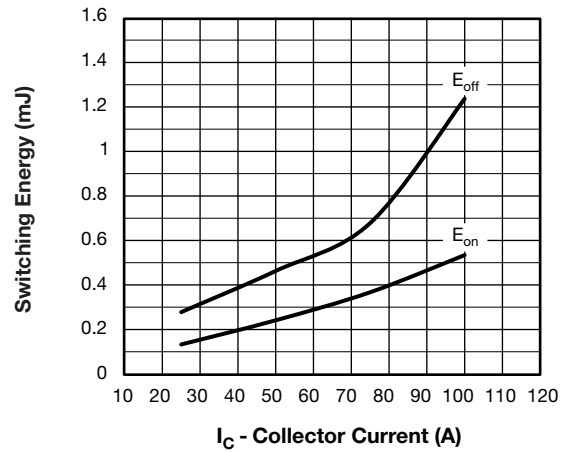


Fig. 9 - Typical IGBT Energy Losses vs.  $I_C$   
 $T_J = 125\text{ }^\circ\text{C}$ ,  $L = 500\text{ }\mu\text{H}$ ,  $V_{CC} = 360\text{ V}$ ,  
 $R_g = 5\text{ }\Omega$ ,  $V_{GE} = 15\text{ V}$ , Diode used: 60APH06

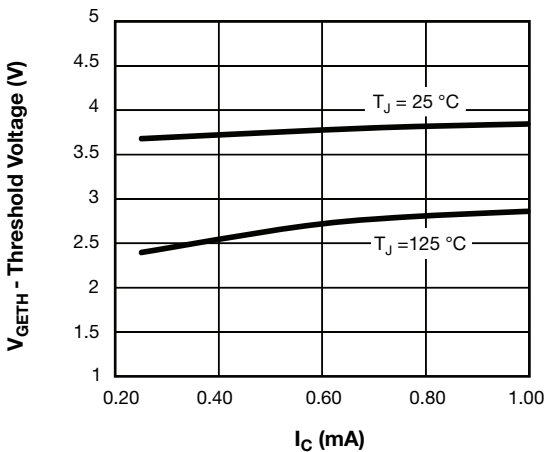


Fig. 7 - Typical IGBT Threshold Voltage

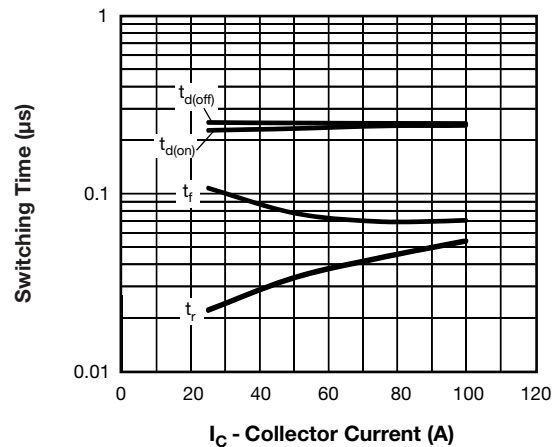


Fig. 10 - Typical IGBT Switching Time vs.  $I_C$   
 $T_J = 125\text{ }^\circ\text{C}$ ,  $L = 500\text{ }\mu\text{H}$ ,  $V_{CC} = 360\text{ V}$ ,  
 $R_g = 5\text{ }\Omega$ ,  $V_{GE} = 15\text{ V}$ , Diode used: 60APH06