

=251800

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IGBT-inverter

ELECTRICAL CHARACTERISTICS

$T_C = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter/Test Conditions	Min.	Typ.	Max.	Unit	
$V_{GE(th)}$	Gate Emitter Threshold Voltage	5.0	5.8	6.5		
$V_{CE(sat)}$	Collector Emitter Saturation Voltage	$V_{CE}=V_{GE}, I_C=3\text{mA}$				
		$I_C=75\text{A}, V_{GE}=15\text{V}, T_J=25$		2.1	2.5	V
		$I_C=75\text{A}, V_{GE}=15\text{V}, T_J=125$		2.4		
I_{CES}	Collector Leakage Current	$I_C=75\text{A}, V_{GE}=15\text{V}, T_J=150$		2.5		
					μA	
					mA	
					nA	
					μC	
					nF	
					pF	
					ns	
					ns	
					ns	
					ns	
					ns	
					ns	
					ns	
					ns	

CE

GE

Unit

V

Nm

Nm

g

Figure 5. Switching Energy vs Collector Current
IGBT-inverte r

Figure 6. Reverse Biased Safe Operating Area
IGBT-inverte r

Figure 11. Switching Energy vs Forward Current
Diode-inverter

Figure 12. Transient Thermal Impedance of
Diode and IGBT-inverter

Figure 13. Circuit Diagram