




Symbol	Parameter	Max.	Units
$I_D @ T_c = 25^\circ\text{C}$	Continuous Drain Current, $V_{GS} @ 10\text{V}$	140	A
$I_D @ T_c = 100^\circ\text{C}$	Continuous Drain Current, $V_{GS} @ 10\text{V}$	85	
I_{DM}	Pulsed Drain Current		



Symbol	Characteristics	Typ.	Max.	Units
	Junction-to-case			

Symbol	Parameter	Min.	Typ.	Max.	Units	Conditions
$V_{(BR)DSS}$	Drain-to-Source breakdown voltage	100			V	$V_{GS} = 0V, I_D$
$R_{DS(on)}$	Static Drain-to-Source on-resistance		4.4	6	m	$V_{GS}=10V, I_D=20A$
$V_{GS(th)}$	Gate threshold voltage	2		4	V	$V_{DS}=V_{GS}, I_D=250\mu A$
I_{DSS}	Drain-to-Source leakage current $T_j=25^\circ C$			1		$V_{DS}=100V, V_{GS}=0V,$
I_{GSS}	Gate-to-Source forward leakage			100	nA	$V_{GS}=20V, V_{DS}=0V$
				-100		$V_{GS}=-20V, V_{DS}=0V$
Q_g	Total gate charge		43		nC	$T_j=25^\circ C, V_{GS}=10V,$ $V_{DS}=50V, I_D=20A$
Q_{gs}	Gate-to-Source charge		10			
Q_{gd}	Gate-to-Drain("Miller") charge		11			
$t_{d(on)}$	Turn-on delay time		13		ns	$V_{GS}=10V$ $V_{DS}=50V$ $R_G=3$ $I_D=20A$
t_r	Rise time		26			
$t_{d(off)}$	Turn-Off delay time		45			
t_f	Fall time		38			
C_{iss}	Input capacitance		3880		pF	$V_{GS}=0V$ $V_{DS}=50V$ $f=100kHz$
C_{oss}	Output capacitance		572			
C_{rss}	Reverse transfer capacitance		17			

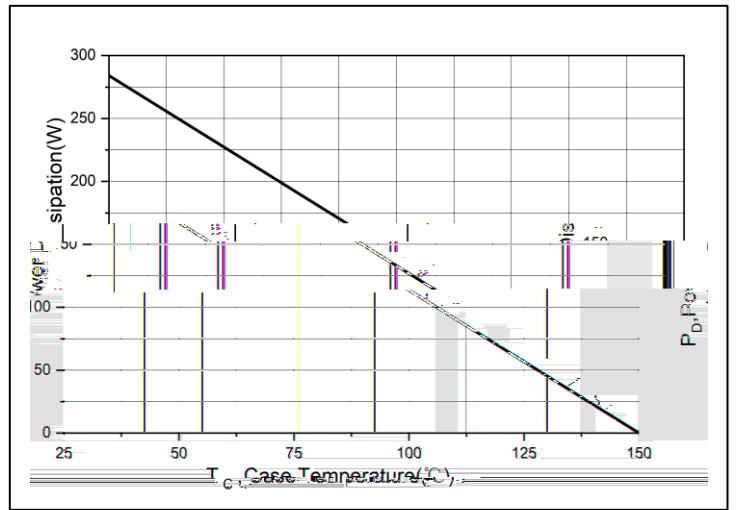
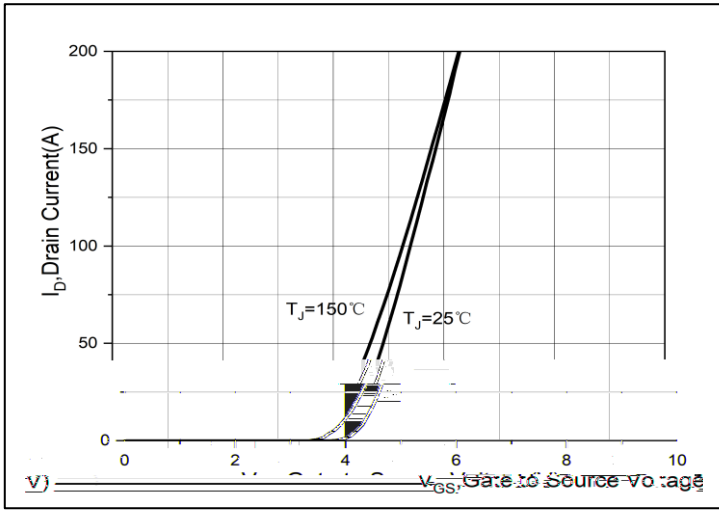
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Symbol	Parameter	Min.	Typ.	Max.	Units	Conditions
I_S	Continuous Source Current (Body Diode)			167	A	MOSFET symbol showing the integral reverse p-n junction diode. 
I_{SM}	Pulsed Source Current (Body Diode)			417	A	
V_{SD}	Diode Forward Voltage			1.2	V	$I_S=20A, V_{GS}=0V$
t_{rr}	Reverse Recovery Time		60		ns	$I_F=20A, di/dt=1$
Q_{rr}	Reverse Recovery Charge		61		nC	



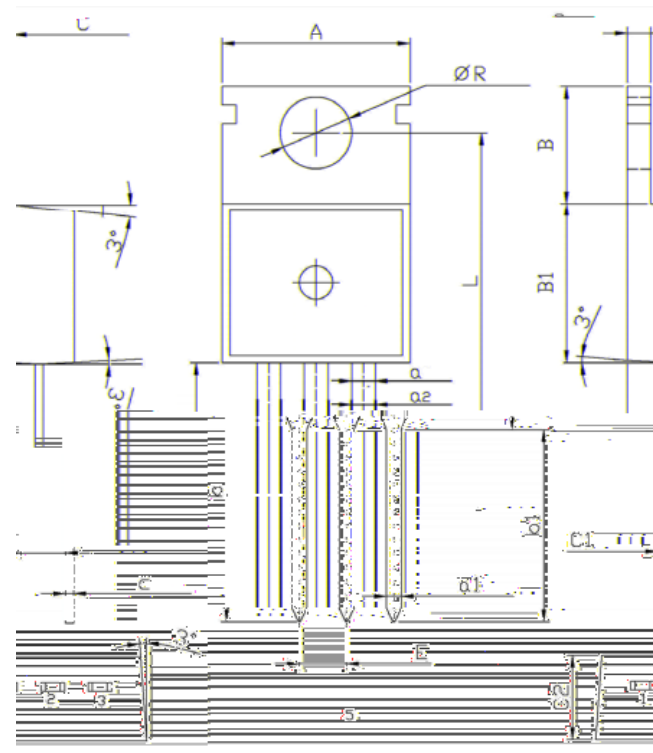


Typical Electrical and Thermal Characteristics





Unit:mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	9.8	10.2	C	1.2	1.4
R	3.56	3.64	B	6.3	6.7
L	15.7	16.1	B1	9.0	9.4
b	12.6	13.6	C1	2.2	2.6
b1	9.6	10.6	a1	0.7	0.9
a	1.22	1.32	c	0.4	0.6
E	2.34	2.74	C2	4.3	4.7
Q2	1.25	1.45			



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