



YJB190C80BZJ

Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V, I_D=250\mu A, T_j=25$	800	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=800V, V_{GS}=0V, T_j=25$	-	-	1	μA
		$V_{DS}=800V, V_{GS}=0V, T_j=125$	-	-	100	
Gate-Source Leakage Current	I_{GSS}	$V_{GS}=\pm 20V, V_{DS}=0V, T_j=25$	-	-	± 10	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu A, T_j=25$	3	3.8	4.6	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V, I_D=12A, T_j=25$	-	153	190	m
		$V_{GS}=10V, I_D=12A, T_j=150$	-	405	503	m
Diode Forward Voltage	V_{SD}	$I_S=22A, V_{GS}=0V, T_j=25$	-	0.86	1.2	V
Gate Resistance	R_G	$f=1MHz, T_j=25$	-	4	-	
Dynamic Parameters						
Input Capacitance	C_{iss}	$V_{DS}=400V, V_{GS}=0V, f=1MHz, T_j=25$	-	2944	-	
Output Capacitance	C_{oss}		-	44.3	-	
Reverse Transfer Capacitance	C_{rss}		-			



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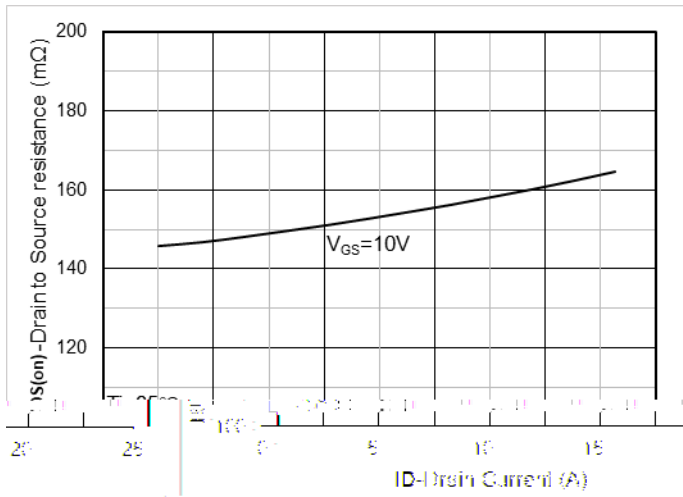


Figure 7. RDS(on) vs. Drain Current; typical values

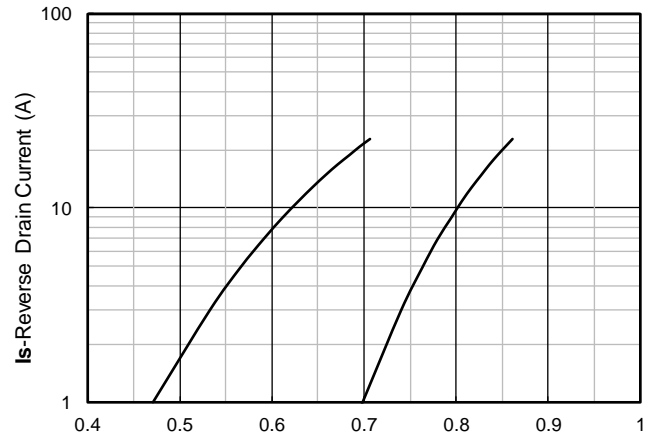


Figure 8. Forward characteristics of reverse diode; typical values

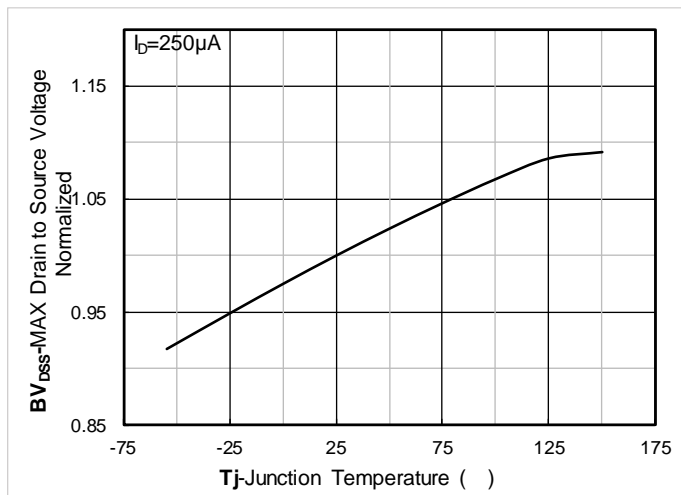


Figure 9. Normalized breakdown voltage

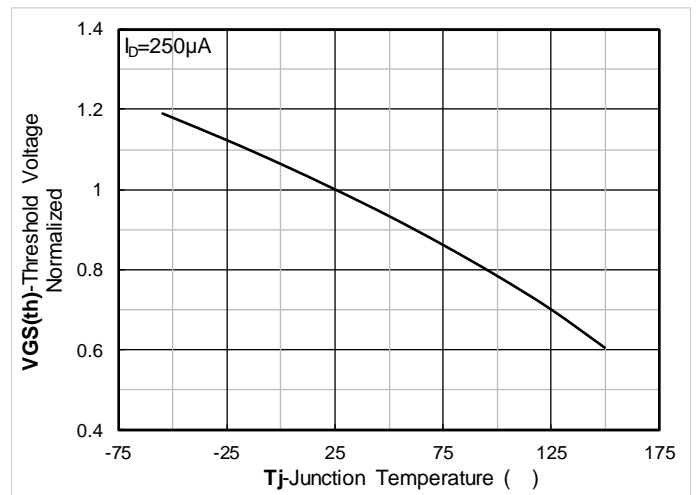


Figure 10. Normalized Threshold voltage

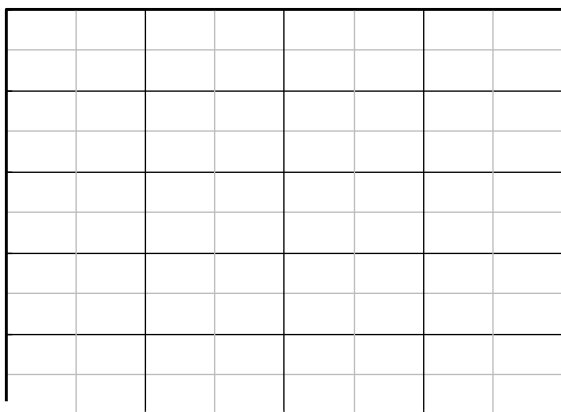


Figure 11. Current dissipation

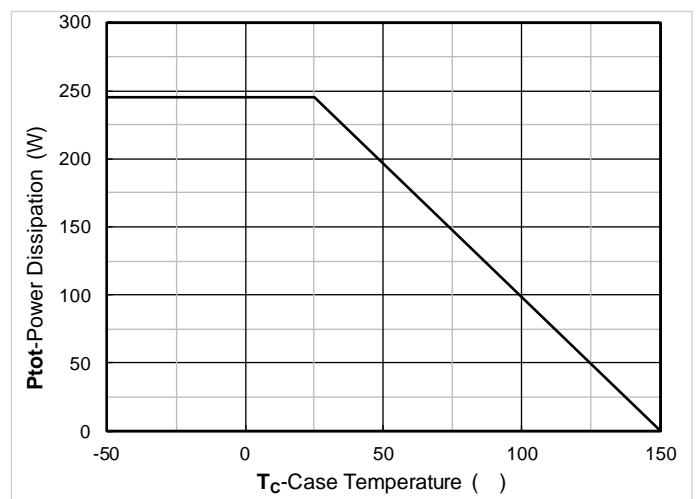


Figure 12. Power dissipation



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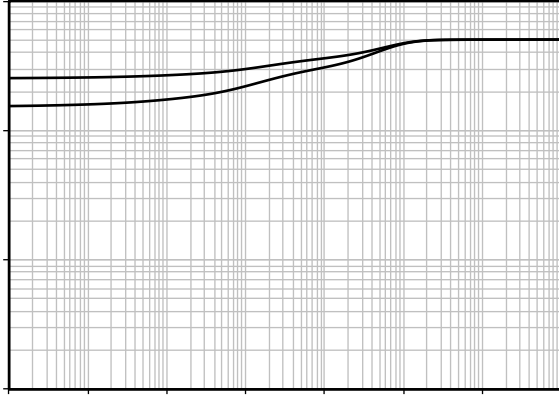


Figure 13. Maximum Transient Thermal Impedance

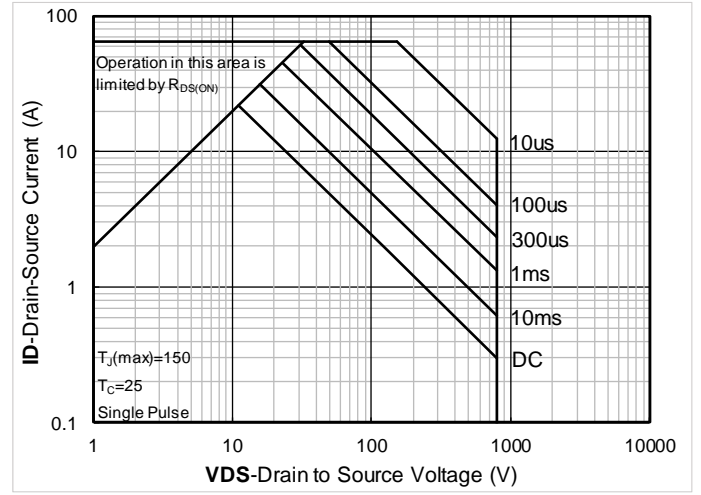


Figure 14. Safe Operation Area



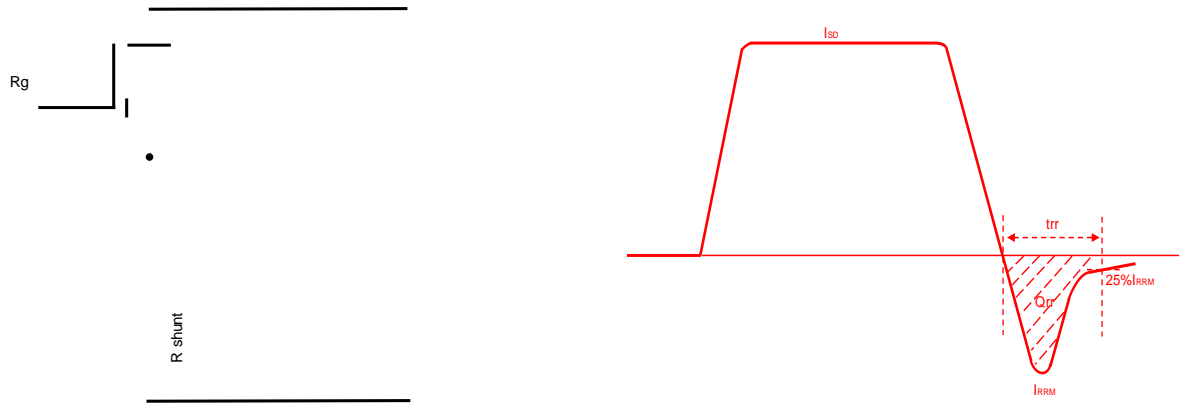
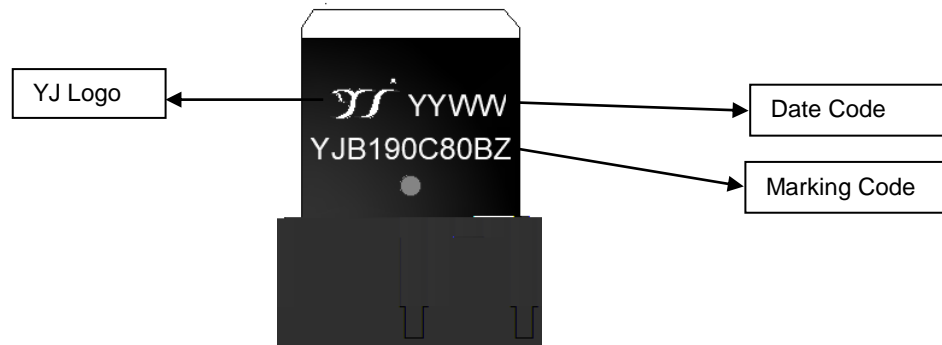


Figure D. Diode Recovery Test Circuit & Waveform



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Marking Information



Note

1. All marking is at middle of the product body
2. All marking is in laser printing
3. YJB190C80BZ is marking code, YYWW is date code, "YY" is year, "WW" is week
4. Body color: Black



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