

Maximum Ratings @T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitance load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	40	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage @ I _R = 0.1mA	V _R		
RMS Reverse Voltage	V _{R(RMS)}	28	V
Average Rectified Output Current @ T _T = 115°C	I _O	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	45	A
Non-Repetitive Peak Forward Surge Current 5μs Single Half Sine-Wave	I _{FSM}	430	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Terminal (Note 4)	R _{θJT}	36	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

Electrical Characteristics @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V _F	-	-	0.53	V	I _F = 1.0A, T _A = 25°C
		-	-	0.49		I _F = 1.0A, T _A = 125°C
		-	-	0.70		I _F = 2.0A, T _A = 25°C
		-	-	0.64		I _F = 2.0A, T _A = 125°C
Leakage Current (Note 5)	I _R	-	-	0.1	mA	V _R = 40V, T _A = 25°C
		-	-	4.0		V _R = 40V, T _A = 100°C
Total Capacitance	C _T	-	-	80	pF	V _R = 5V, f = 1MHz

Notes: 4. Thermal Resistance: Junction to terminal, unit mounted on PC board with 5.0 mm² (0.013 mm thick) copper pads as heat sink.
 5. Short duration pulse test used to minimize self-heating effect.

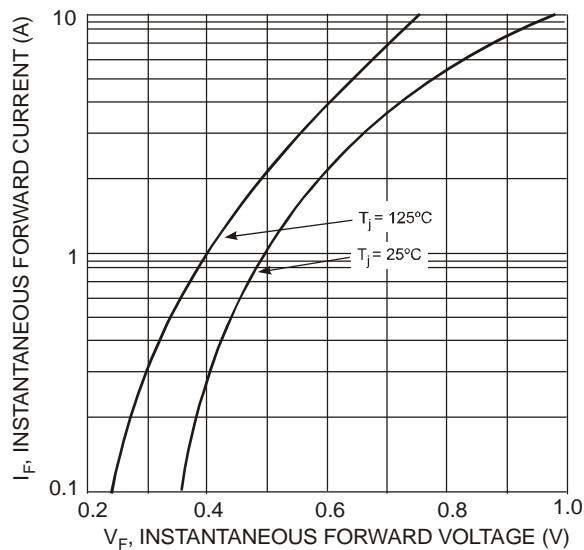


Fig. 1 Typical Forward Characteristics

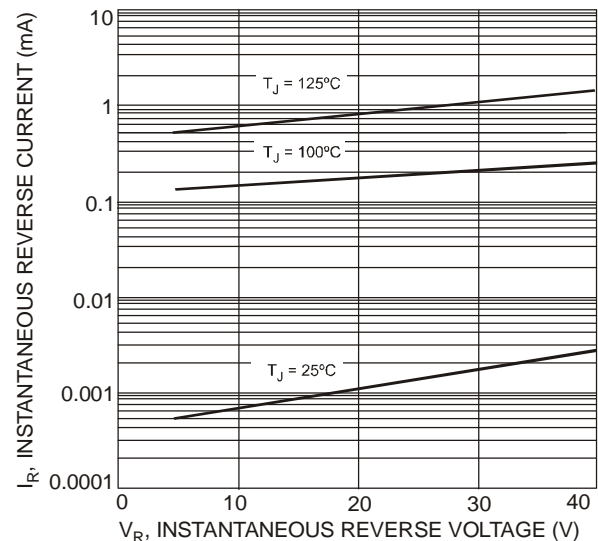
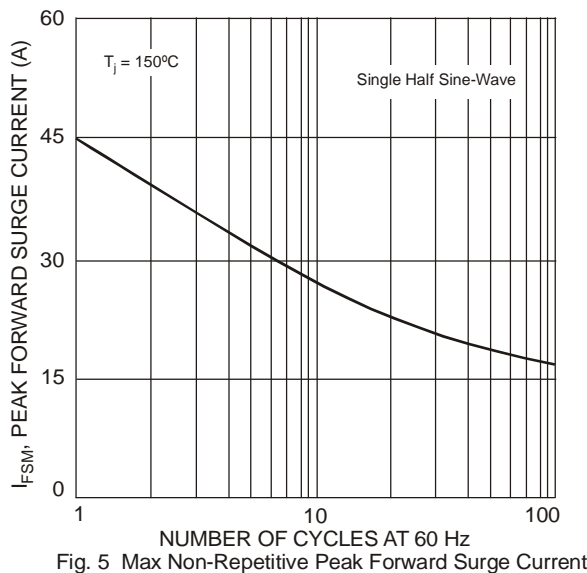
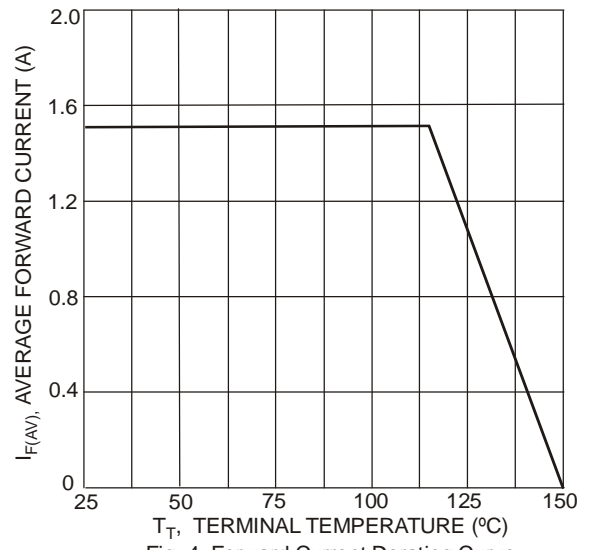
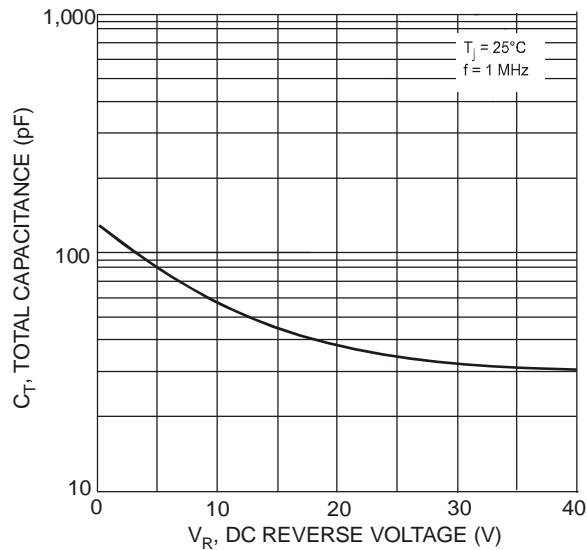
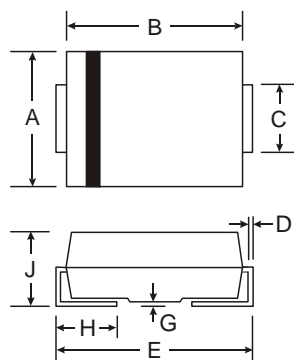


Fig. 2 Typical Reverse Characteristics

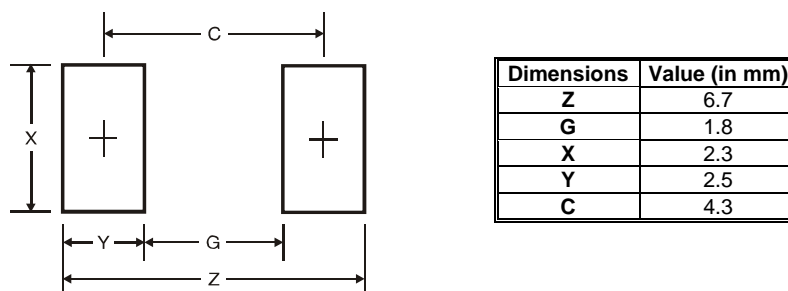


Package Outline Dimensions



SMB		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.57
C	1.96	2.21
D	0.15	0.31
E	5.00	5.59
G	0.05	0.20
H	0.76	1.52
J	2.00	2.50
All Dimensions in mm		

Suggested Pad Layout



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