

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

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

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	800	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage (Note 5)	V _R		
RMS Reverse Voltage	V _{R(RMS)}	560	V
Average Rectified Output Current @T _A = +40°C	I _O	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	30	A
Maximum Full Load Reverse Current, Full Cycle Average, 0.375"(9.5mm) Length at T _A = +55°C	I _{R(AV)}	100	μA

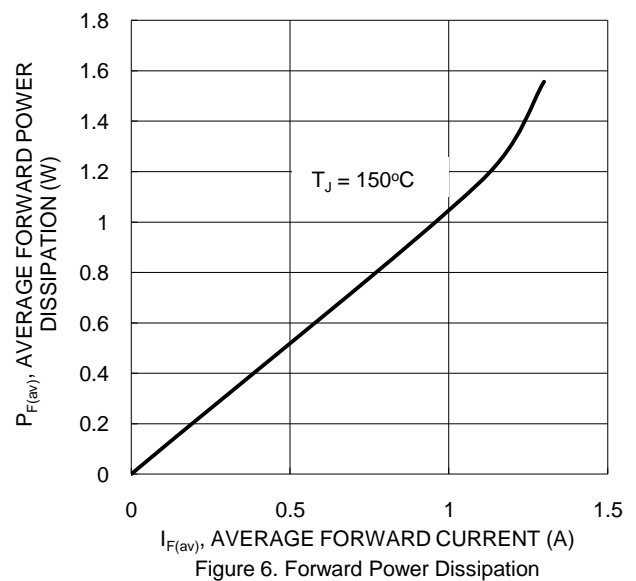
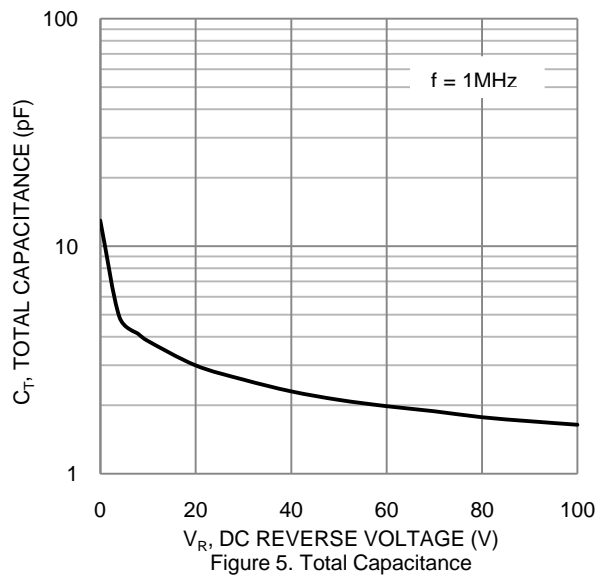
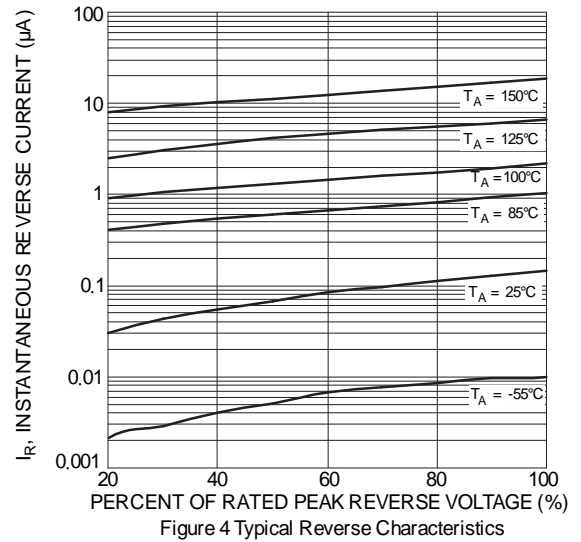
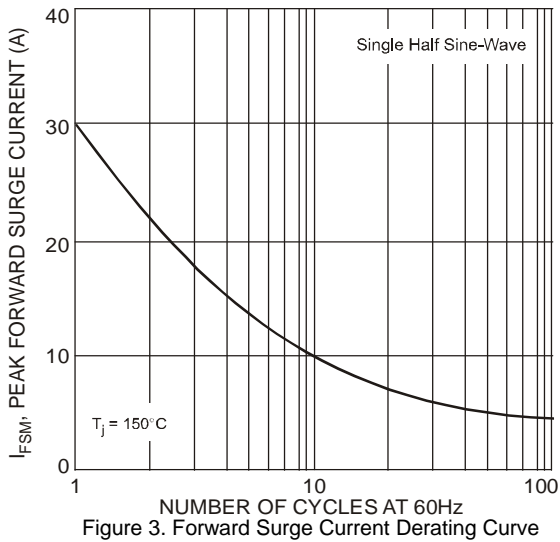
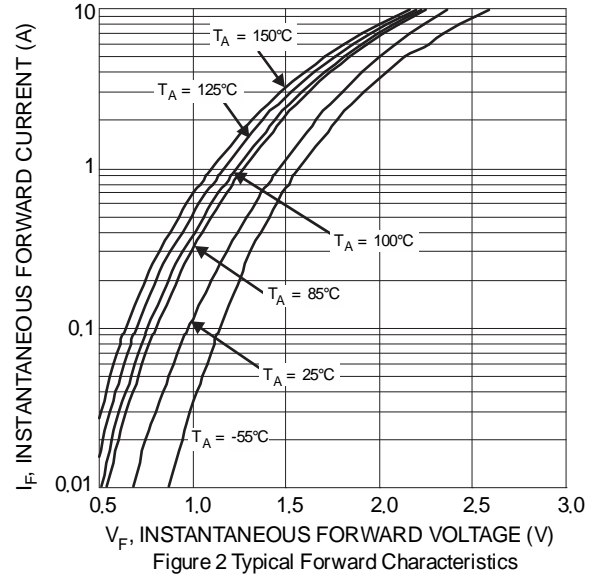
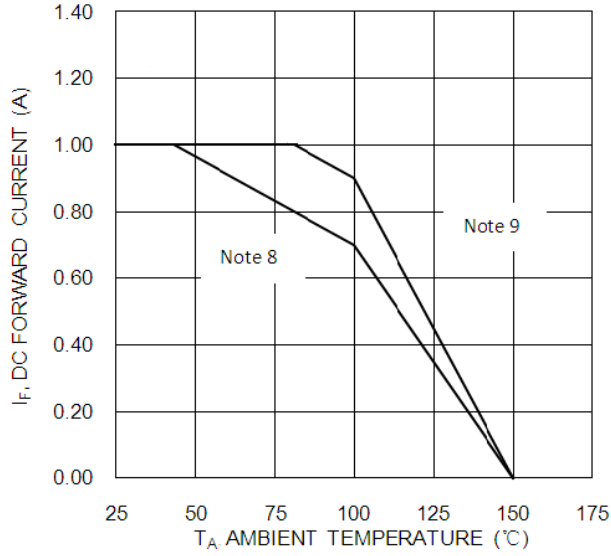
Thermal Characteristics

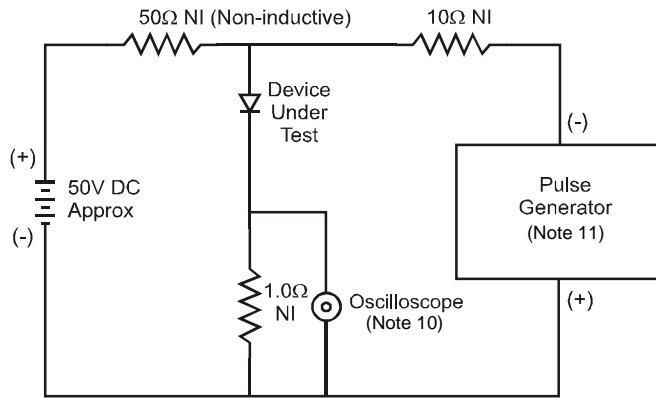
Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Case (Note 8)	R _{θJC}	25	°C/W
Typical Thermal Resistance, Junction to Ambient (Note 8)	R _{θJA}	150	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Reverse Breakdown Voltage (Note 5) @I _R = 5μA	V _{(BR)R}	800	V
Maximum Forward Voltage Drop @I _F = 1.0A	V _F	1.85	V
Peak Reverse Current @T _A = +25°C	I _R	5.0	μA
at Rated DC Blocking Voltage (Note 5) @T _A = +100°C		50	
Maximum Reverse Recovery Time (Note 6)	t _{RR}	75	ns
Typical Total Capacitance (Note 7)	C _T	5	pF

- Notes:
5. Short duration pulse test used to minimize self-heating effect.
 6. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A. See figure 7.
 7. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 8. Device mounted on FR-4 substrate, 1"x1", 2oz, single-sided, PC boards with 0.1"x0.15" copper pad.
 9. Device mounted on FR-4 substrate, 0.4"x0.5", 2oz, single-sided, PC boards with 0.2"x0.25" copper pad.

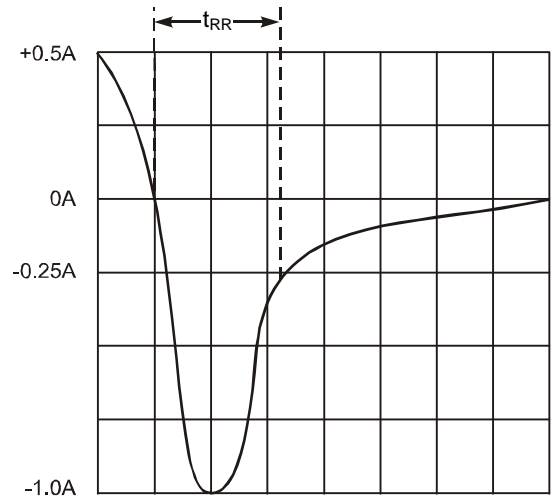




Notes:

10. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.

11. Rise Time = 10ns max. Input Impedance = 50Ω.



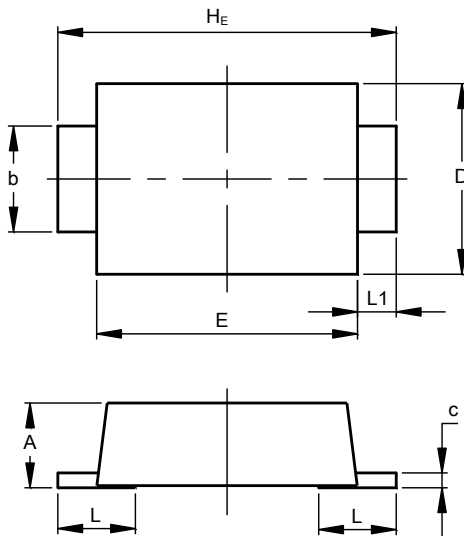
Set time base for 50/100 ns/cm

Figure 7. Reverse Recovery Time Characteristic and Test Circuit

Package Outline Dimensions

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SMA-FS

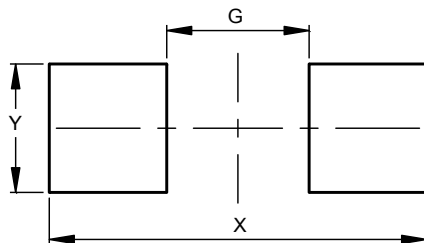


SMA-FS		
Dim	Min	Max
A	0.90	1.20
b	1.30	1.50
c	0.11	0.21
D	2.30	2.70
E	3.30	3.70
H _E	4.40	4.80
L	0.70	1.10
L1	0.45	0.65
All Dimensions in mm		

Suggested Pad Layout

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SMA-FS



Dimensions	Value (in mm)
G	2.10
X	5.30
Y	1.77

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