

**Maximum Ratings** (@T<sub>A</sub> = +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 <sub>RRM</sub>	50	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>RM</sub>		
Average Rectified Output Current	I <sub>O</sub>	5	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	70	A

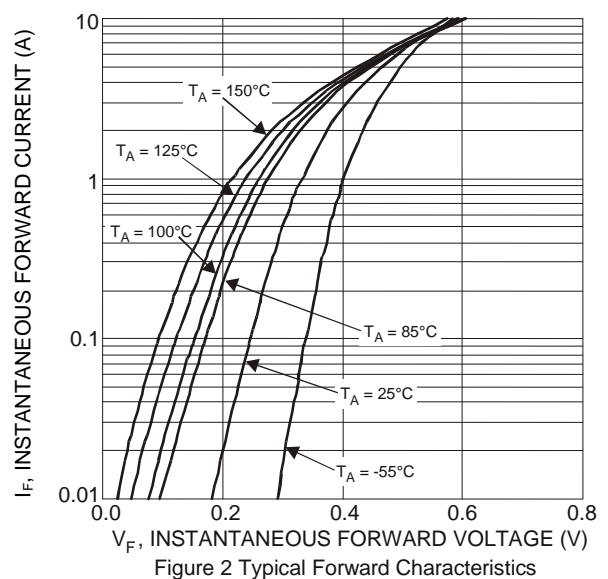
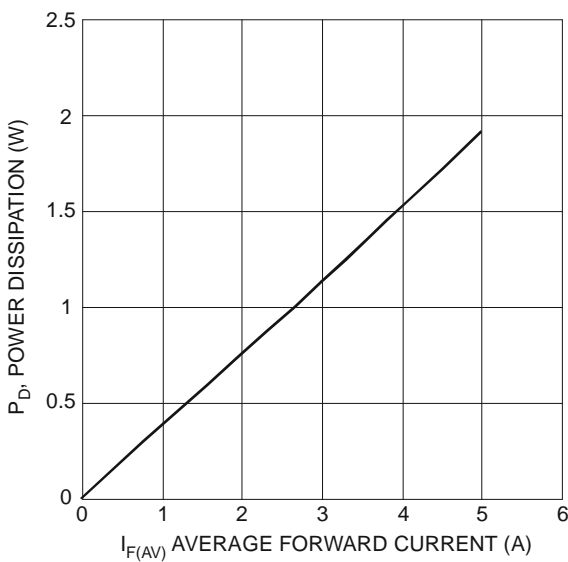
**Thermal Characteristics**

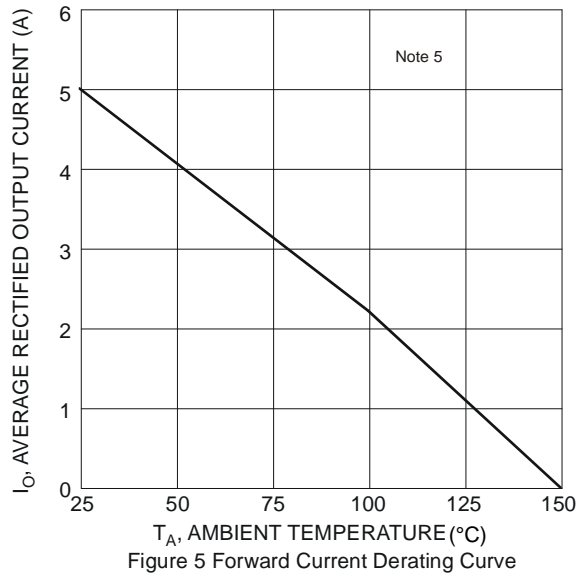
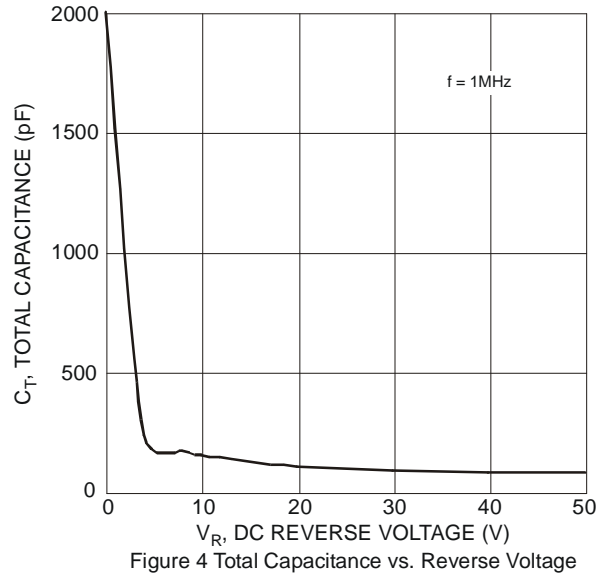
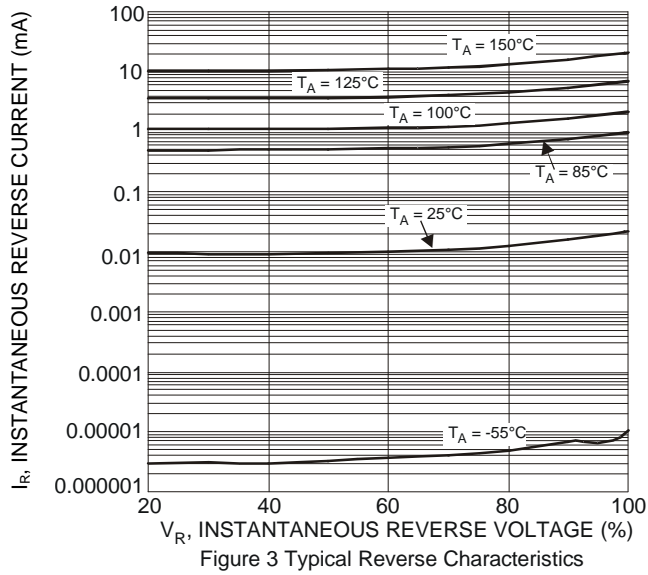
Characteristic	Symbol	Value	Unit
Typical Thermal Resistance Junction to Ambient (Note 5)	R <sub>θJA</sub>	40	°C/W
Typical Thermal Resistance Junction to Case (Note 5)	R <sub>θJC</sub>	25	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

**Electrical Characteristics** (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V <sub>F</sub>	—	0.39	—	V	I <sub>F</sub> = 2.5A, T <sub>J</sub> = +25°C
		—	0.46	0.53		I <sub>F</sub> = 5A, T <sub>J</sub> = +25°C
		—	0.32	—		I <sub>F</sub> = 2.5A, T <sub>J</sub> = +125°C
		—	0.44	0.5		I <sub>F</sub> = 5A, T <sub>J</sub> = +125°C
Leakage Current (Note 6)	I <sub>R</sub>	—	30	150	μA	V <sub>R</sub> = 50V, T <sub>J</sub> = +25°C
		—	7	45	mA	V <sub>R</sub> = 50V, T <sub>J</sub> = +125°C

Notes: 5. Device mounted on FR-4 substrate, 1" x 1", 2oz, single-sided, PC boards with 0.56" x 0.73" copper pad.  
 6. Short duration pulse test used to minimize self-heating effect.

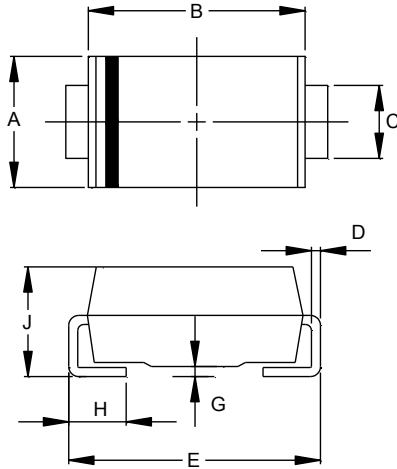




## Package Outline Dimensions

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

### SMA

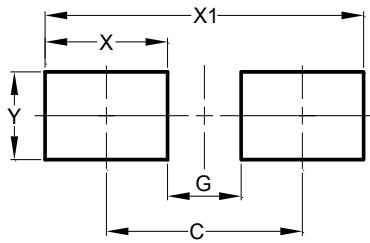


SMA		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.05	0.20
H	0.76	1.52
J	1.96	2.40
All Dimensions in mm		

## Suggested Pad Layout

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

### SMA



Dimensions	Value (in mm)
C	4.00
G	1.50
X	2.50
X1	6.50
Y	1.70

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