

## Maximum Ratings (@T<sub>A</sub> = +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 Working Peak Reverse Voltage DC Blocking Voltage (Note 5)	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	800	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	560	V
Average Rectified Output Current @ T <sub>A</sub> = +25°C	I <sub>O</sub>	2.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	55	A

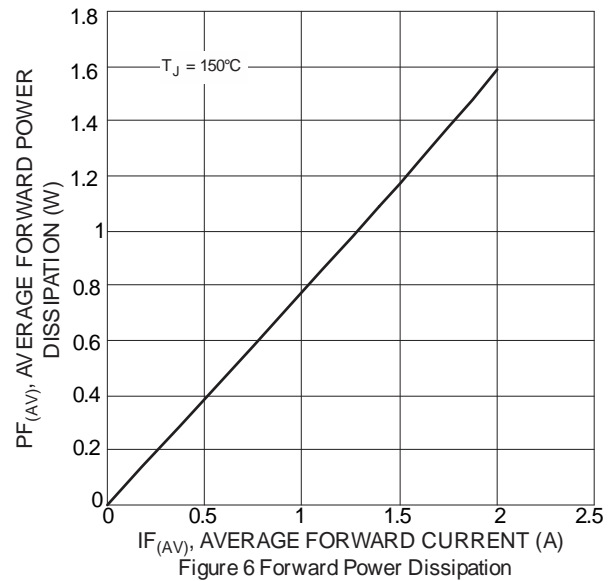
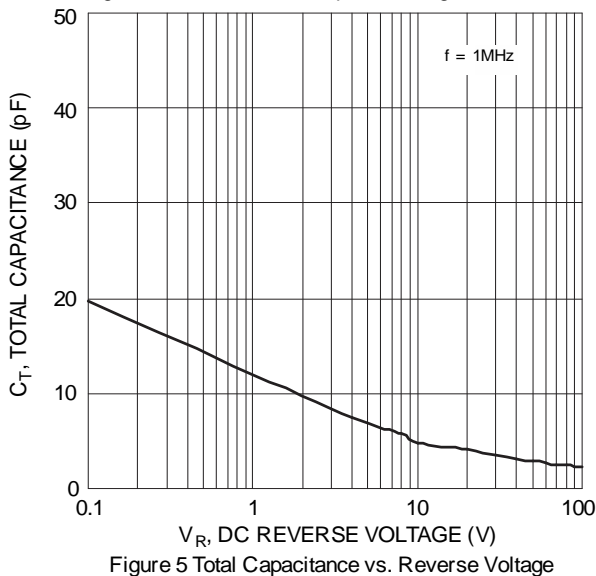
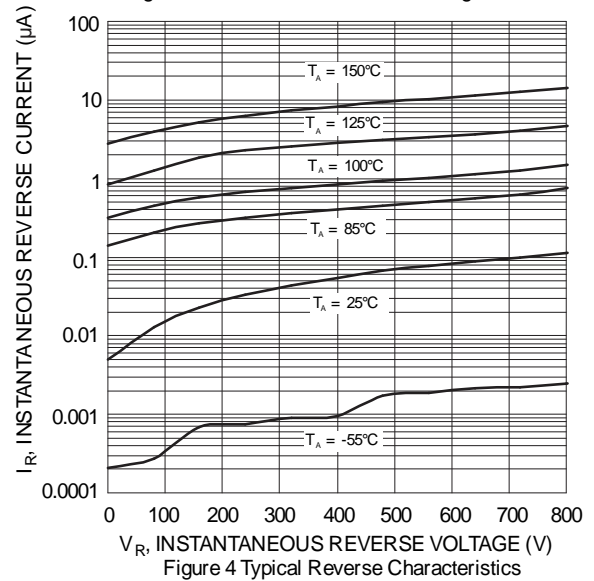
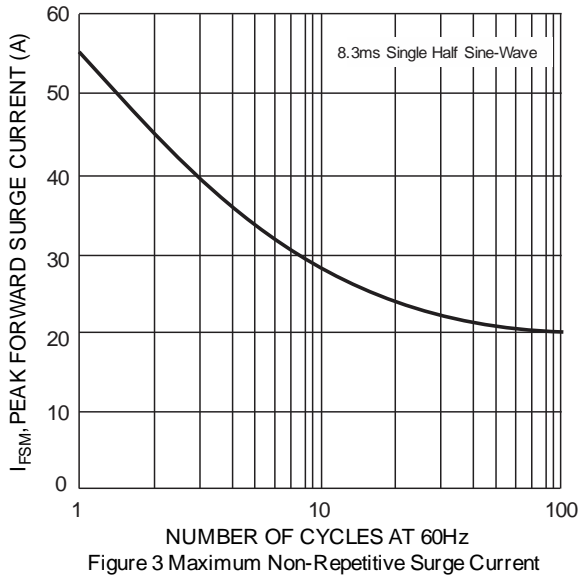
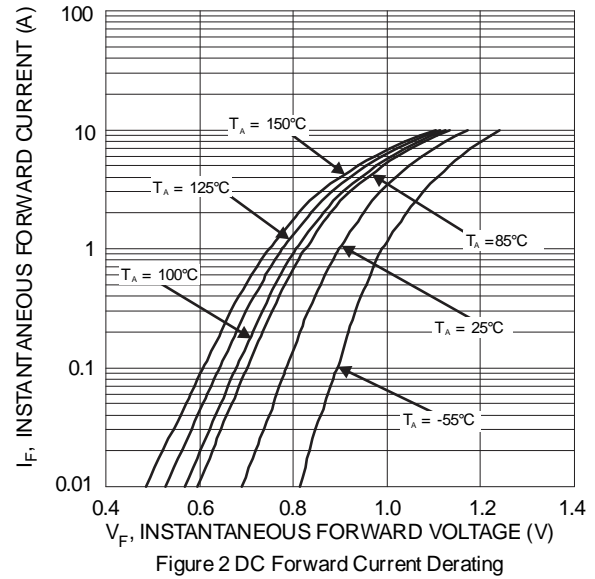
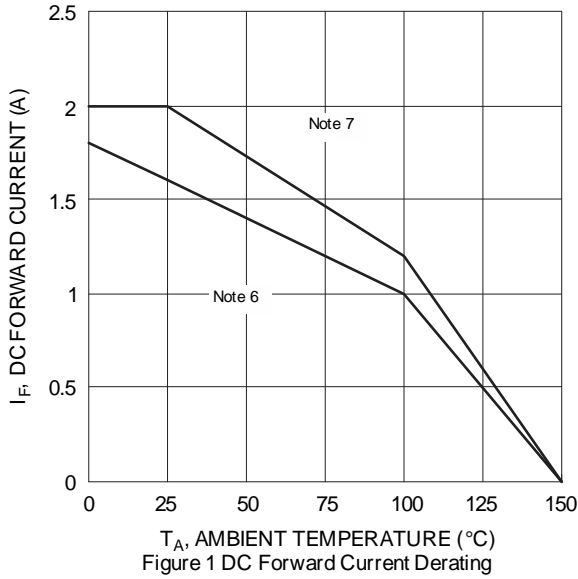
## Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Terminal (Note 7)	R <sub>θJT</sub>	23	°C/W
Typical Thermal Resistance, Junction to Air (Note 7)	R <sub>θJA</sub>	82	°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
Reverse Breakdown Voltage (Note 5)	V <sub>(BR)R</sub>	800	—	—	V	I <sub>R</sub> = 10μA
Forward Voltage	V <sub>F</sub>	—	0.90 0.78 0.95 0.84	1.0 — 1.1 —	V	I <sub>F</sub> = 1A, T <sub>J</sub> = +25°C I <sub>F</sub> = 1A, T <sub>J</sub> = +125°C I <sub>F</sub> = 2A, T <sub>J</sub> = +25°C I <sub>F</sub> = 2A, T <sub>J</sub> = +125°C
Reverse Leakage Current (Note 5)	I <sub>R</sub>	—	0.12 0.005	5 —	μA mA	V <sub>R</sub> = 800V, T <sub>J</sub> = +25°C V <sub>R</sub> = 800V, T <sub>J</sub> = +125°C
Total Capacitance	C <sub>T</sub>	—	8	—	pf	V <sub>R</sub> = 4V <sub>DC</sub> , f = 1MHz

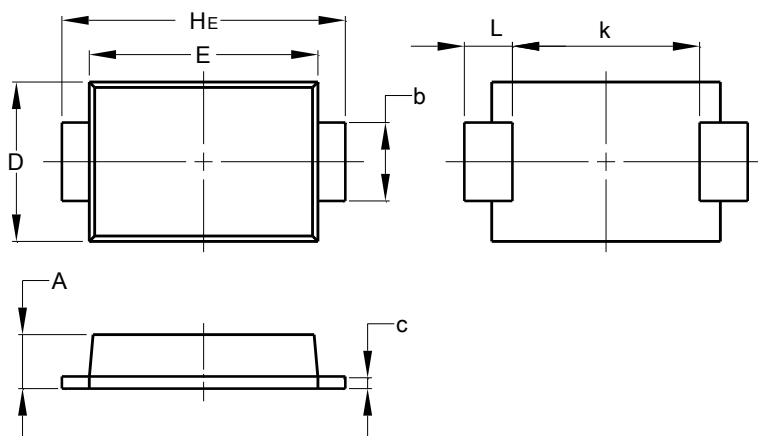
- Notes:
5. Short duration pulse test used to minimize self-heating effect.
  6. Device mounted on FR-4 substrate, 1" x 1", 2oz, single-sided, PC boards with 0.1" x 0.15" copper pads.
  7. Device mounted on FR-4 substrate, 0.4" x 0.5", 2oz, single-sided, PC boards with 0.2" x 0.25" copper pads.



## Package Outline Dimensions

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

**D-FLAT**

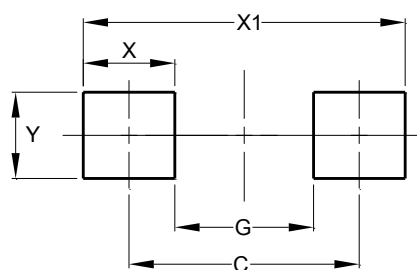


D-FLAT		
Dim	Min	Max
A	0.90	1.10
b	1.25	1.65
c	0.10	0.40
D	2.25	2.95
E	3.95	4.60
k	2.80	—
$H_E$	5.00	5.60
L	0.50	1.30
All Dimensions in mm		

## Suggested Pad Layout

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

**D-FLAT**



Dimensions	Value (in mm)
C	4.65
G	2.80
X	1.85
$X_1$	6.50
Y	1.70

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