

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 Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	1000	V
RMS Reverse Voltage	V _{R(RMS)}	700	V
Average Rectified Output Current (Note 6) @ T _A = +40°C	I _O	1.5	A
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	50	A
I ² t Rating for Fusing (1ms < t < 8.3ms)	I ² t	10.4	A ² S

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient (Note 6) (Per Element)	R _{θJA}	62.5	°C/W
Typical Thermal Resistance, Junction to Lead (Per Element)	R _{θJL}	25	°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
Reverse Breakdown Voltage (Note 7)	V _{(BR)R}	1,000	—	—	V	I _R = 5μA
Forward Voltage (Per Element)	V _F	—	—	1.1	V	I _F = 1.5A, T _A = +25°C
Leakage Current (Note 7) (Per Element)	I _R	—	—	5 500	μA	V _R = 1,000V, T _A = +25°C V _R = 1,000V, T _A = +125°C
Total Capacitance (Per Element)	C _T	—	17	—	pF	V _R = 4V, f = 1.0MHz

Notes: 5. Device mounted on FR-4 substrate, 1"×1", 2oz, single-sided, PC boards with 0.15"×0.26" copper pad.
6. Device mounted on FR-4 substrate, 1"×1", 2oz, single-sided, PC boards with 0.56"×0.73" copper pad.
7. Short duration pulse test used to minimize self-heating effect.

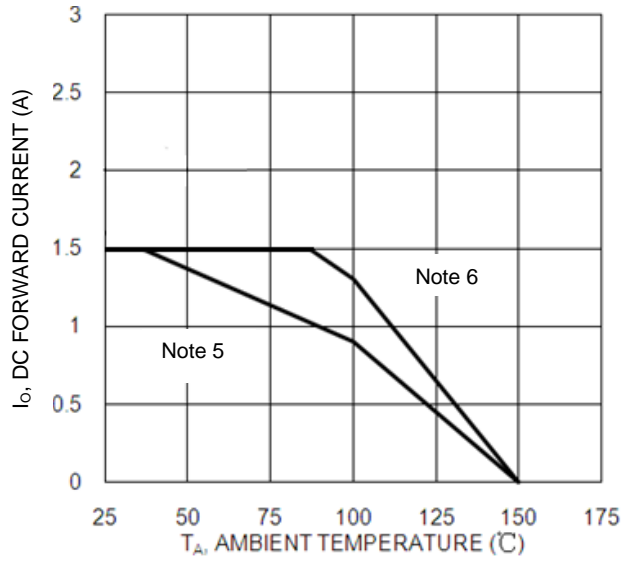


Figure 1. DC Forward Current Derating

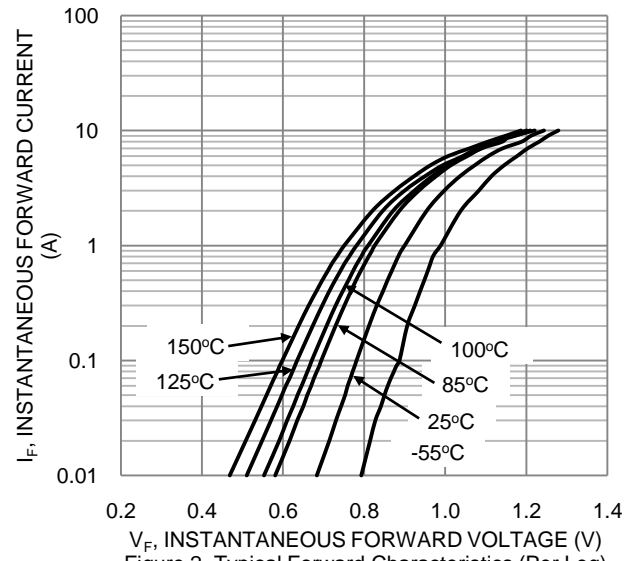


Figure 2. Typical Forward Characteristics (Per Leg)

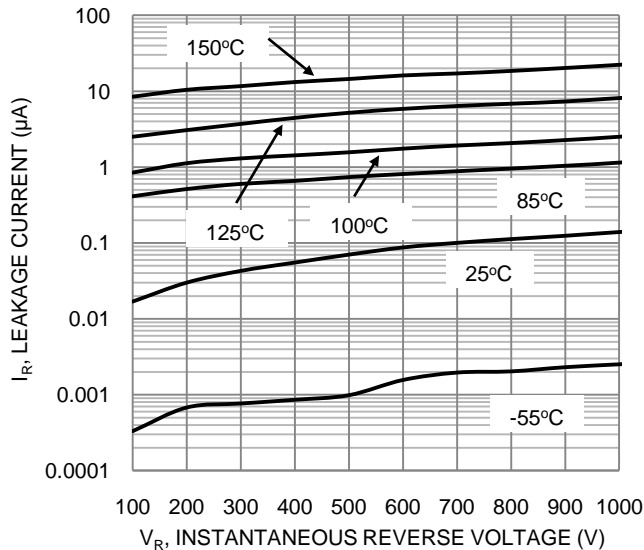


Figure 3. Typical Reverse Characteristics (Per Leg)

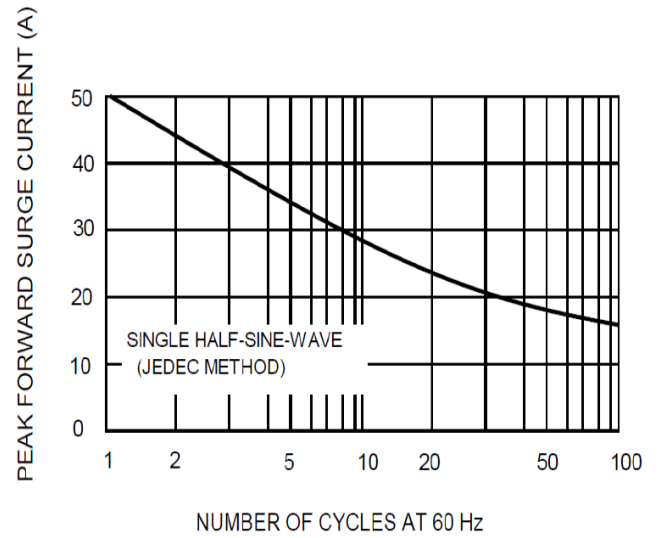


Figure 4. Maximum Non-Repetitive Surge Current

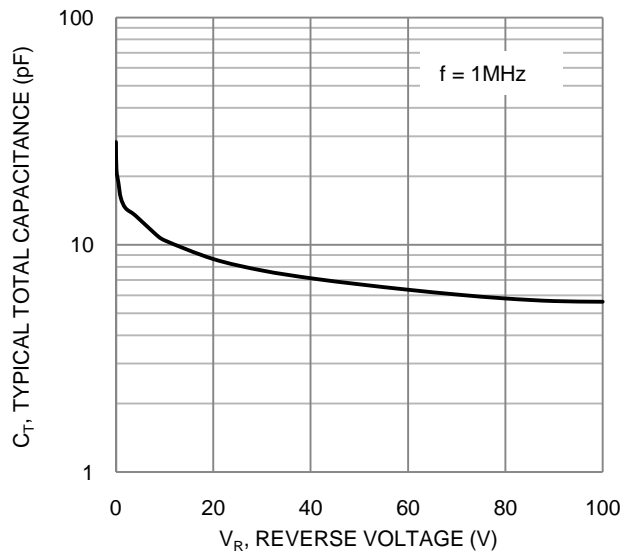
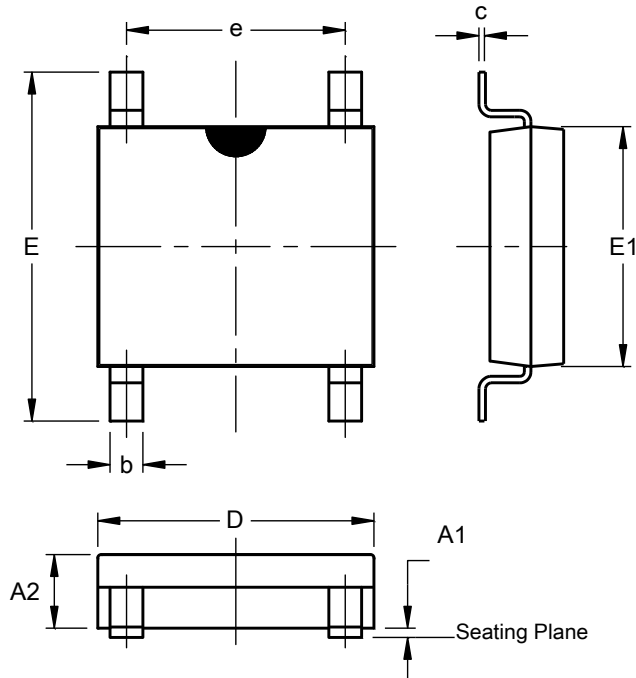


Figure 5. Typical Total Capacitance

Package Outline Dimensions

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

SOPA-4

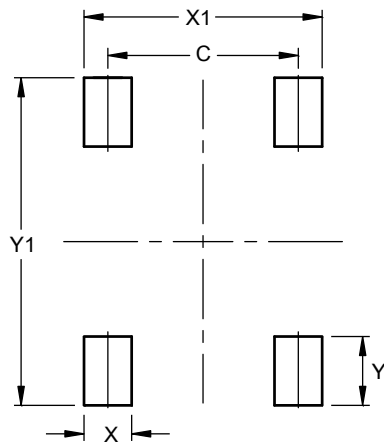


SOPA-4			
Dim	Min	Max	Typ
A1	--	0.20	--
A2	1.20	1.50	--
b	0.50	0.70	--
c	0.15	0.25	--
D	4.80	5.30	--
E	6.00	6.80	--
E1	4.20	4.60	--
e	3.80	4.20	--
All Dimensions in mm			

Suggested Pad Layout

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

SOPA-4



Dimensions	Value (in mm)
C	4.00
X	1.00
X1	5.00
Y	1.45
Y1	6.90

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