NEW PRODUCT

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	1,000	V
RMS Reverse Voltage	$V_{R(RMS)}$	700	V
Average Rectified Output Current (Note 5)@ T_A = +40°C (Note 6)@T_A = +40°C	I_O	0.5 0.8	A
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	30	A
I^2t Rating for Fusing (1ms < t < 8.3ms)	I^2t	3.74	A^2S

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance, Junction to Ambient (Note 6) (Per Element)	$R_{\theta JA}$	101	°C/W
Typical Thermal Resistance, Junction to Lead (Per Element)	$R_{\theta JL}$	42	°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	—	0.93	1.1	V	I_F = 0.8A, T_A = +25°C
Leakage Current (Note 7) (Per Element)	I_R	— —	0.2 21	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	—	8	—	pF	V_R = 4V, f = 1.0MHz

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

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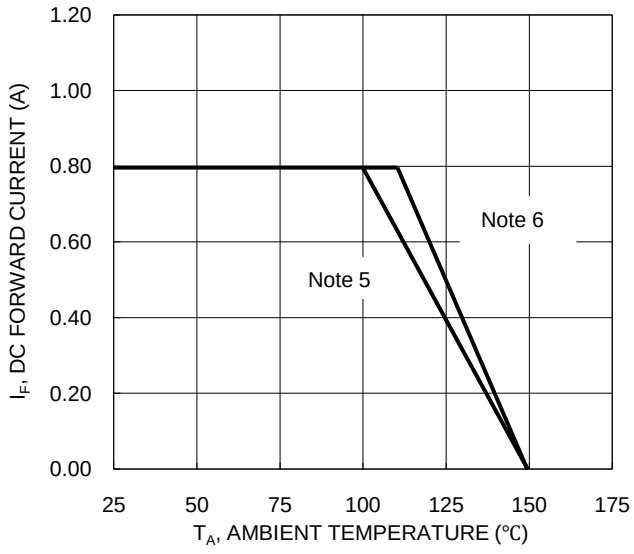

Figure 1. DC Forward Current Derating

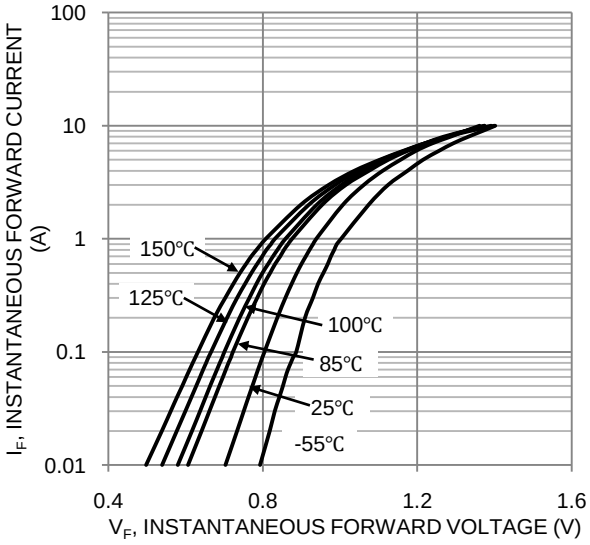

Figure 2. Typical Forward CharacterIstics (Per Leg)

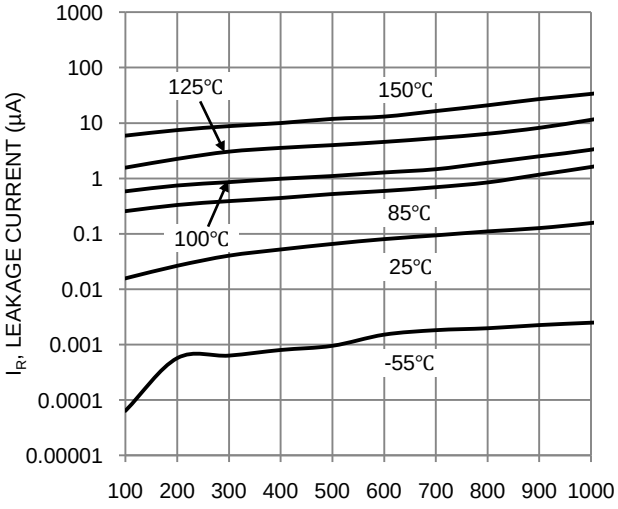

Figure 3. Typical Reverse CharacterIstics (Per Leg)

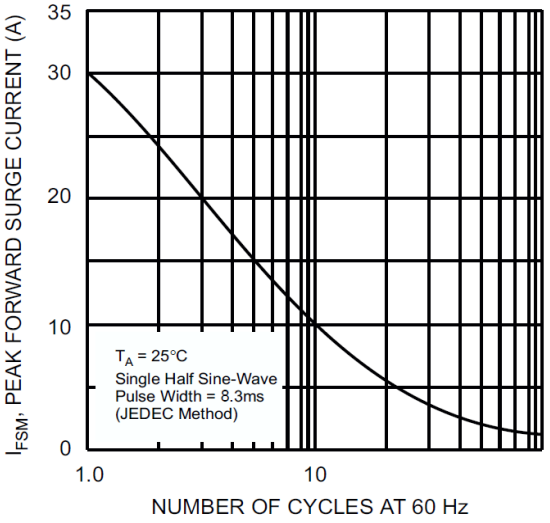

Figure 4. Maximum Peak Forward Surge Current (Per Leg)

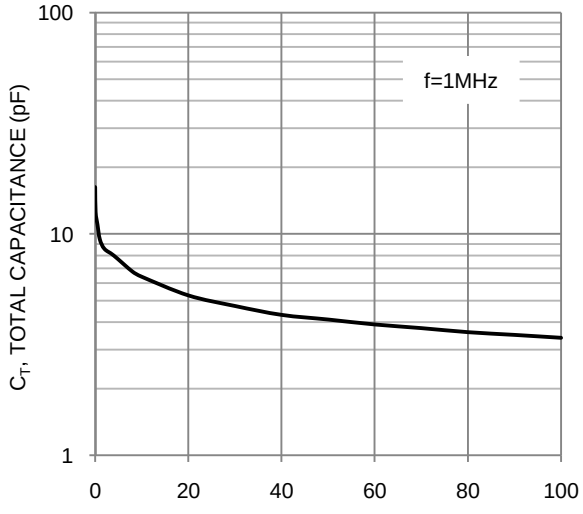

Figure 5. Typical Total Capacitance

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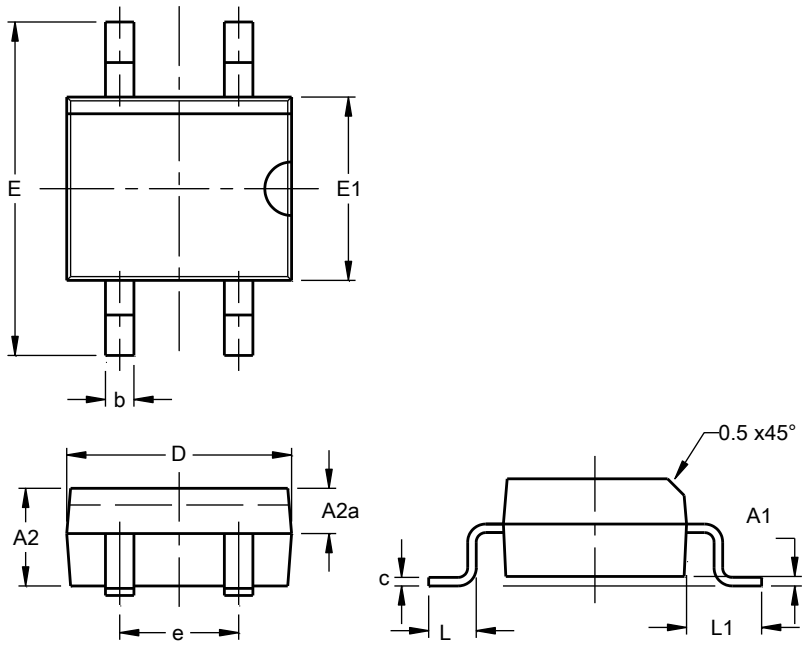
Package Outline Dimensions

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

MBS

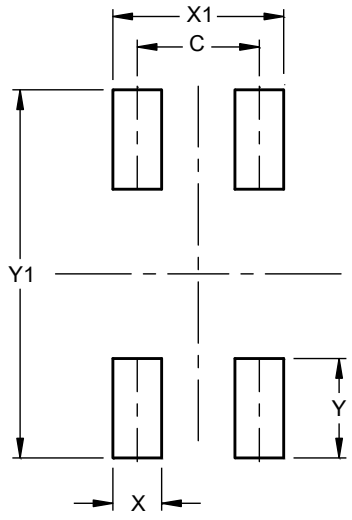


MBS			
Dim	**Min**	**Max**	**Typ**
A1	--	0.20	--
A2	2.30	2.70	--
A2a	0.90	1.30	--
b	0.50	0.70	--
c	0.15	0.25	--
D	4.50	4.95	--
E	--	7.00	--
E1	3.60	4.10	--
e	2.30	2.70	--
L	0.60	1.10	--
L1	--	1.70	--
All Dimensions in mm			

Suggested Pad Layout

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

MBS



Dimensions	Value (in mm)
C	2.50
X	1.00
X1	3.50
Y	2.15
Y1	7.50

NEW PRODUCT

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