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

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM}	60	V
Average Rectified Output Current	I_O	3	A
Non-Repetitive Avalanche Energy (T_J= +25°C, I_{AS}= 2A, L = 50mH)	E_{AS}	120	mJ
Non-Repetitive Peak Forward Surge Current 8.3mS	I_{FSM}	80	A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance (Note 6)	$R_{\theta JA}$	95	°C/W
Typical Thermal Resistance (Note 7)	$R_{\theta JA}$	35	°C/W
Typical Thermal Resistance (Note 6)	$R_{\theta JC}$	15	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +175	°C

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V_F	— — — —	0.43 0.53 0.40 0.52	— 0.60 — —	V	I_F =1.5A, T_J = +25°C I_F =3.0A, T_J = +25°C I_F =1.5A, T_J = +125°C I_F =3.0A, T_J = +125°C
Leakage Current (Note 8)	I_R	— —	0.009 2.7	0.06 15	mA	V_R = 60V , T_J = +25°C V_R = 60V , T_J = +125°C
Total Capacitance	C_T	—	110	—	pF	V_R = 4V , T_J = +25°C, f=1MHz

Notes: 6. Device mounted on FR-4 PCB, 2oz. copper, minimum recommended pad layout per http://www.diodes.com/package-outlines.html.
7. Device mounted on 2 inch x 2 inch Al board.
8. Short duration pulse test used to minimize self-heating effect.

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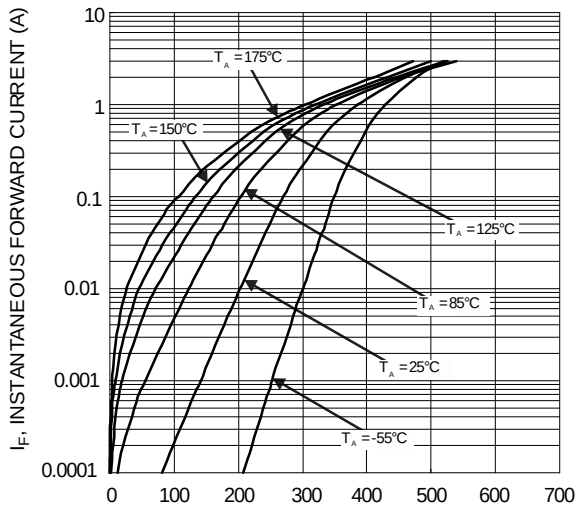

Figure 1 Typical Forward Characteristics

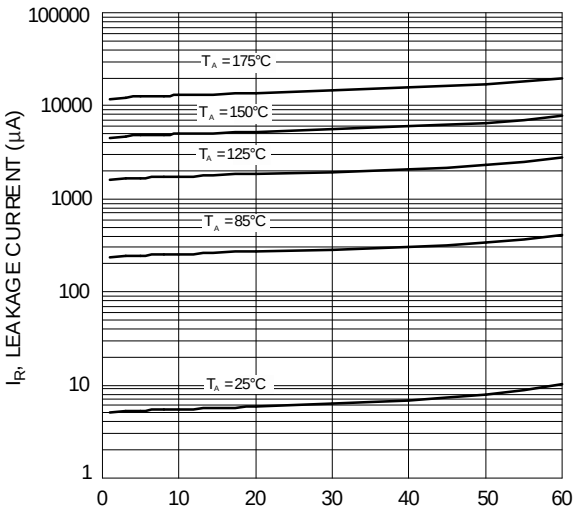

Figure 2 Typical Reverse Characteristics

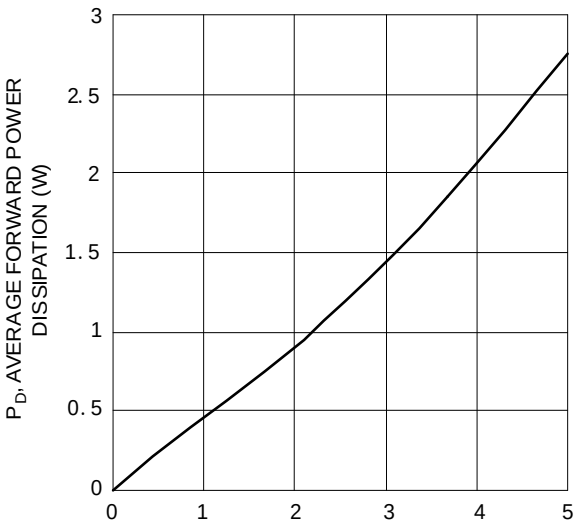

Figure 3 Forward Power Dissipation

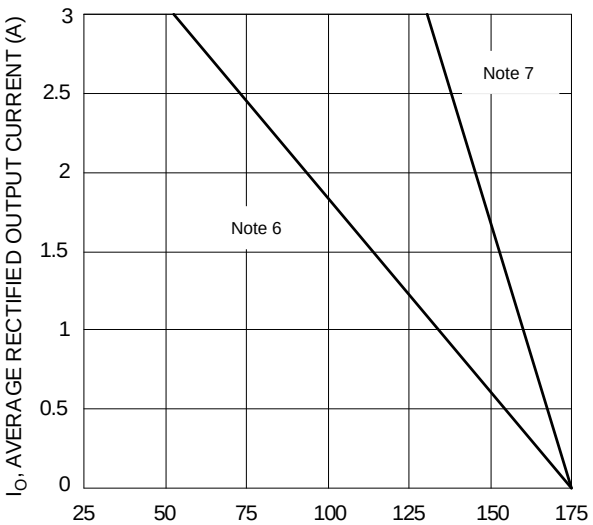

Figure 4 DC Forward Current Derating Curve

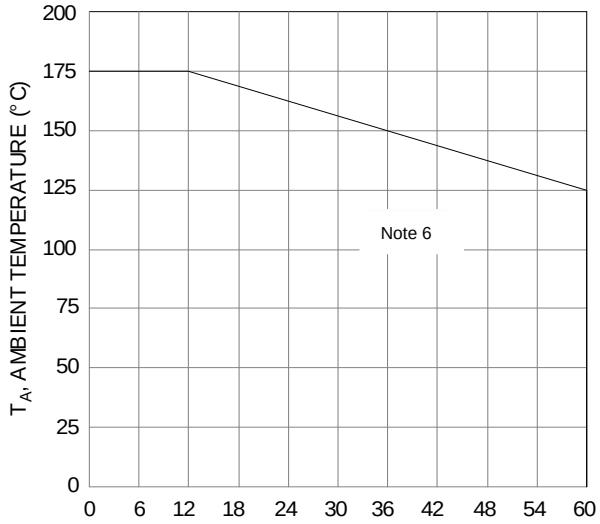

Figure 5 Operating Temperature Derating

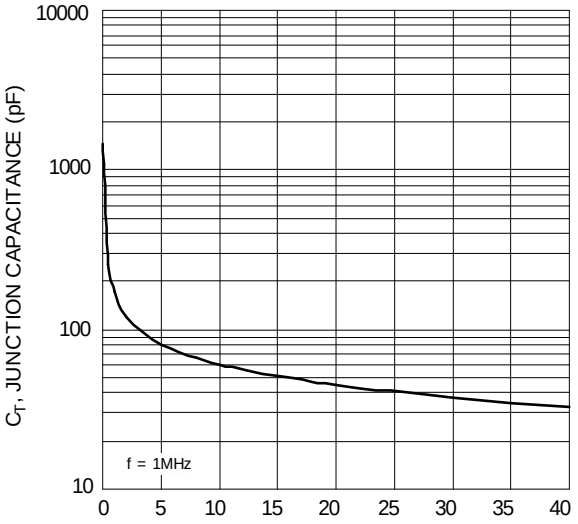

Figure 6 Typical Junction Capacitance

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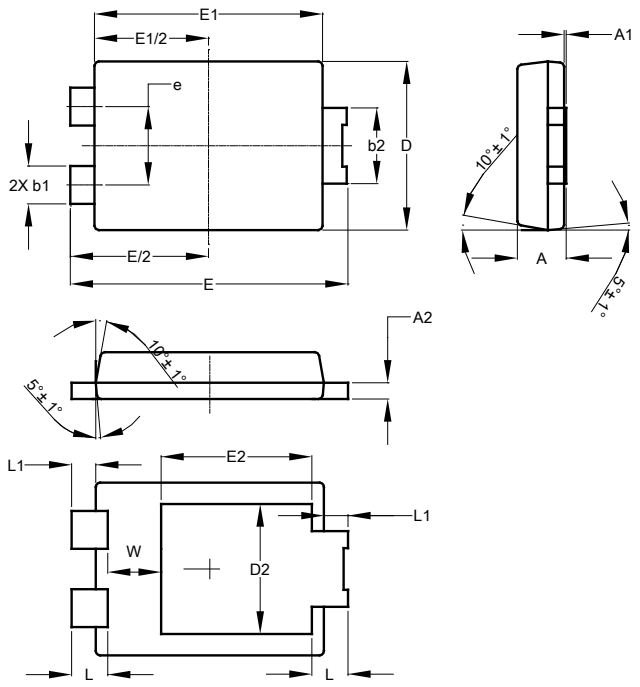
Package Outline Dimensions

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

PowerDI5

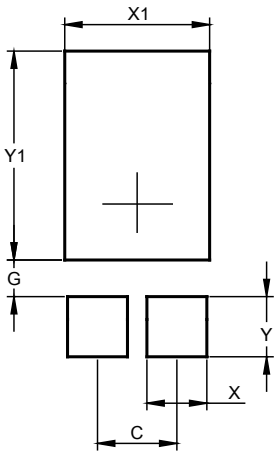


PowerDI5			
Dim	**Min**	**Max**	**Typ**
A	1.05	1.15	1.10
A1	0.00	0.05	--
A2	0.33	0.43	0.381
b1	0.80	0.99	0.89
b2	1.70	1.88	1.78
D	3.90	4.05	3.966
D2	--	--	3.054
E	6.40	6.60	6.504
e	--	--	1.84
E1	5.30	5.45	5.37
E2	--	--	3.549
L	0.75	0.95	0.85
L1	0.50	0.65	0.57
W	1.10	1.41	1.255
All Dimensions in mm			

Suggested Pad Layout

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

PowerDI5



Dimensions	Value (in mm)
C	1.840
G	0.852
X	1.390
X1	3.360
Y	1.400
Y1	4.860

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