

**Maximum Ratings** (@ $T_A = +25^\circ\text{C}$ , 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 ( $T_J = +25^\circ\text{C}$ , $I_{AS} = 2\text{A}$ , $L = 50\text{mH}$ )	$E_{AS}$	120	mJ
Non-Repetitive Peak Forward Surge Current 8.3ms	$I_{FSM}$	80	A

**Thermal Characteristics**

Characteristic	Symbol	Value	Unit
Typical Thermal Resistance (Note 7)	$R_{\theta JA}$	95	$^\circ\text{C/W}$
Typical Thermal Resistance (Note 8)	$R_{\theta JA}$	35	$^\circ\text{C/W}$
Typical Thermal Resistance (Note 7)	$R_{\theta JC}$	15	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +175	$^\circ\text{C}$

**Electrical Characteristics** (@ $T_A = +25^\circ\text{C}$ , unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	$V_F$	—	0.43	—	V	$I_F = 1.5\text{A}$ , $T_J = +25^\circ\text{C}$
		—	0.53	0.60		$I_F = 3.0\text{A}$ , $T_J = +25^\circ\text{C}$
		—	0.40	—		$I_F = 1.5\text{A}$ , $T_J = +125^\circ\text{C}$
		—	0.52	—		$I_F = 3.0\text{A}$ , $T_J = +125^\circ\text{C}$
Leakage Current (Note 9)	$I_R$	—	0.009	0.06	mA	$V_R = 60\text{V}$ , $T_J = +25^\circ\text{C}$
		—	2.7	15		$V_R = 60\text{V}$ , $T_J = +125^\circ\text{C}$
Total Capacitance	$C_T$	—	110	—	pF	$V_R = 4\text{V}$ , $T_J = +25^\circ\text{C}$ , $f = 1\text{MHz}$

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

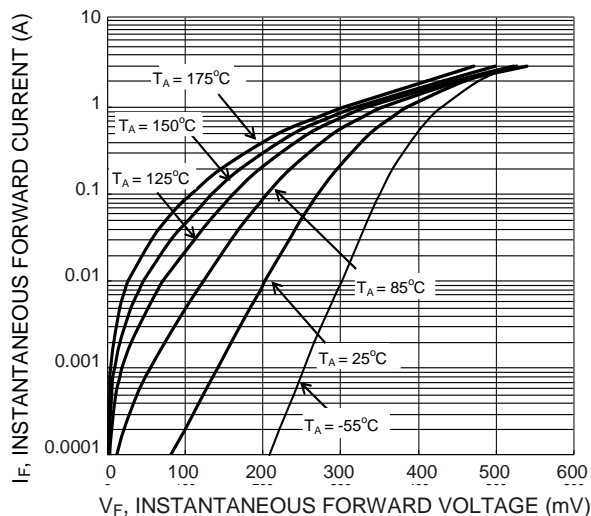


Figure 1 Typical Forward Characteristics

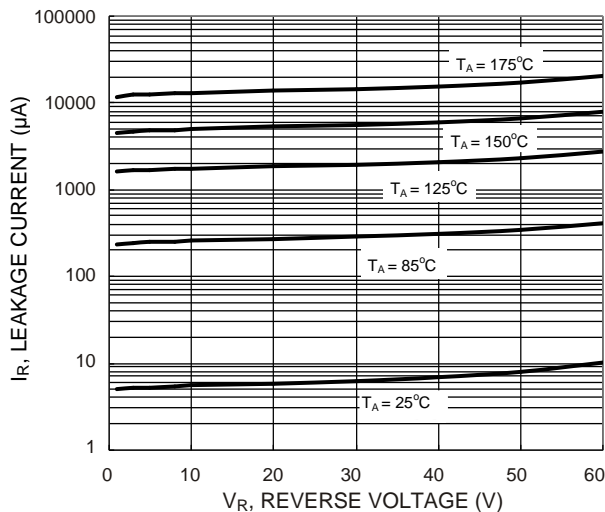
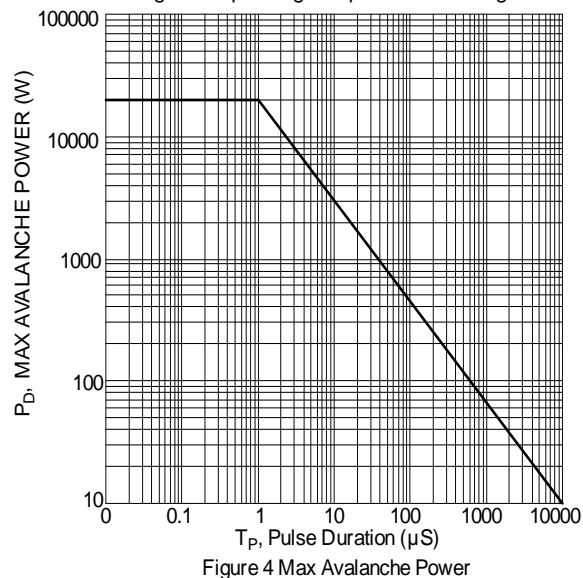
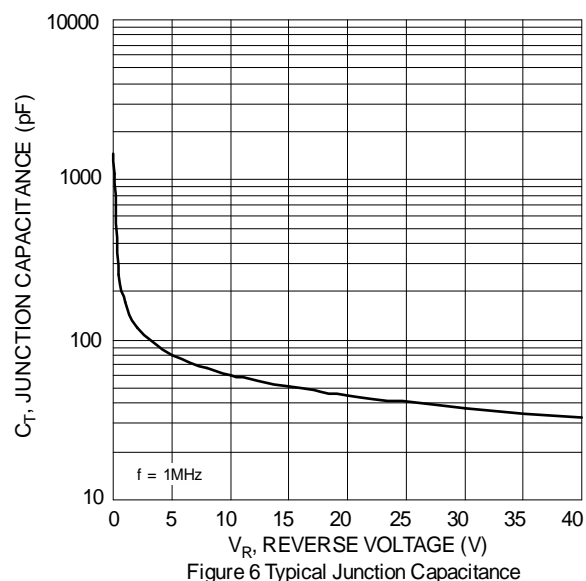
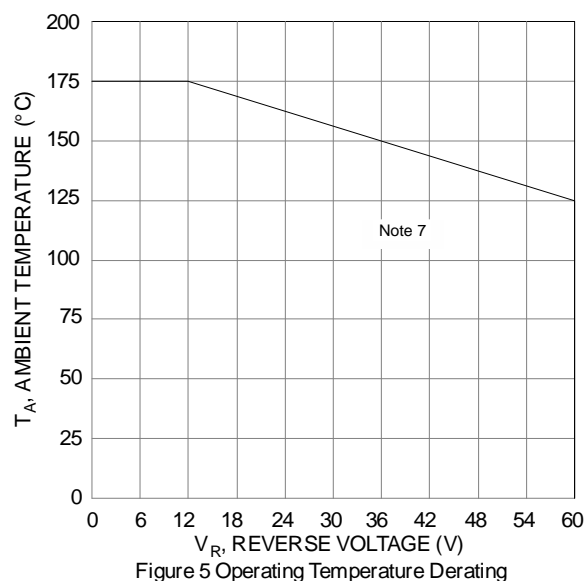
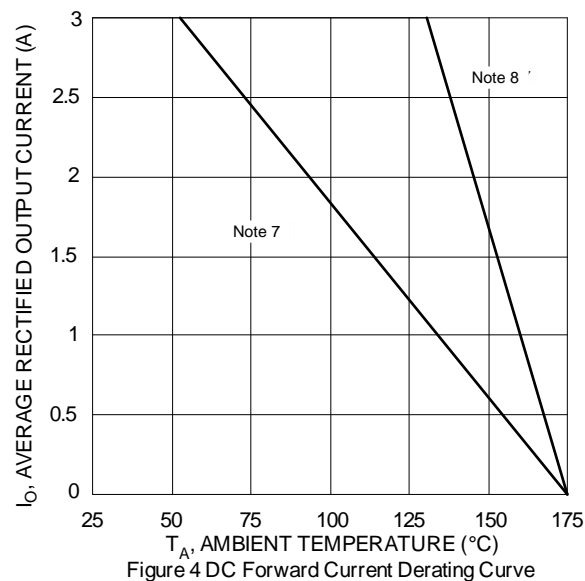
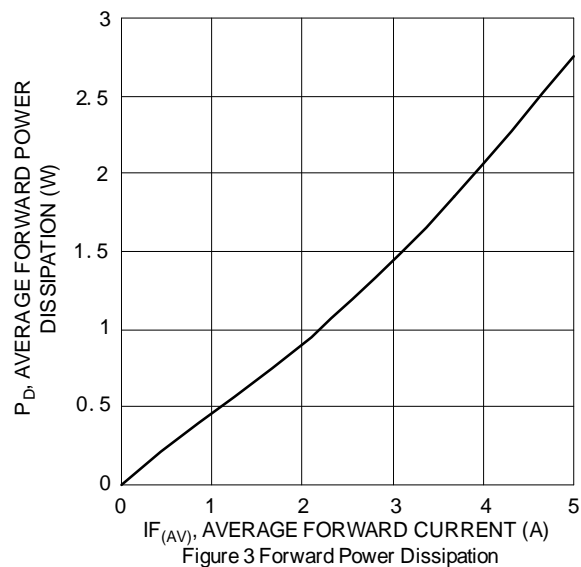


Figure 2 Typical Reverse Characteristics



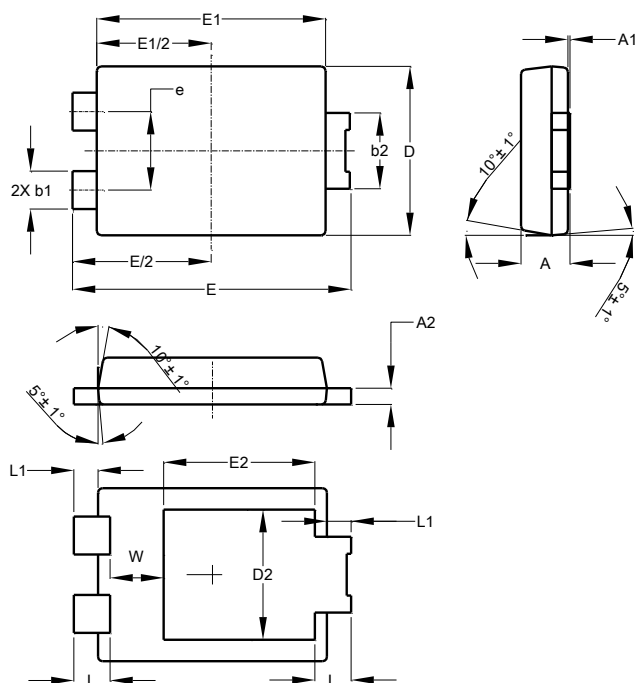




## Package Outline Dimensions

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

### PowerDI5

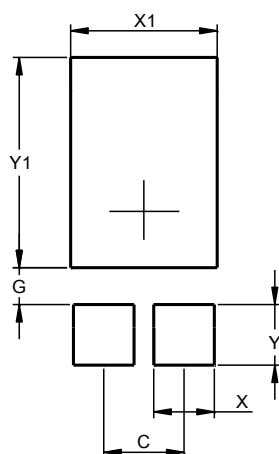


PowerDI5			
Dim	Min	Max	Typ
A	1.05	1.15	1.10
A1	0.00	0.05	--
A2	0.33	0.43	0.381
b1	0.80	0.99	0.89
b2	1.70	1.88	1.78
D	3.90	4.05	3.966
D2	--	--	3.054
E	6.40	6.60	6.504
e	--	--	1.84
E1	5.30	5.45	5.37
E2	--	--	3.549
L	0.75	0.95	0.85
L1	0.50	0.65	0.57
W	1.10	1.41	1.255
All Dimensions in mm			

## 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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