Electrical Characteristics @ T_A = 25 C unless otherwise specified

Characteristic	Symbol	Value	Unit	Test Condition
Minimum Reverse Breakdown Voltage (Note 5)	$V_{(BR)R}$	200	V	I_R = 5 A
Maximum Forward Voltage	V_{FM}	0.875 0.71 0.89 0.85 0.72 1.25	V	I_F = 3A, T_S = 25 C I_F = 3A, T_S = 150 C I_F = 4A, T_S = 25 C I_F = 4A, T_S = 100 C I_F = 4A, T_S = 150 C I_F = 12A, T_S = 25 C
Maximum Reverse Leakage Current (Note 5)	I_{RM}	5 150	A	T_S = 25 C, V_R = 200V T_S = 150 C, V_R = 200V
Maximum Reverse Recovery Time	t_{rr}	25	ns	I_F = 0.5A, I_R = 1.0A I_{RR} = 0.25A (See figure 7)

Notes: 5. Short duration test pulse used to minimize self-heating effect.

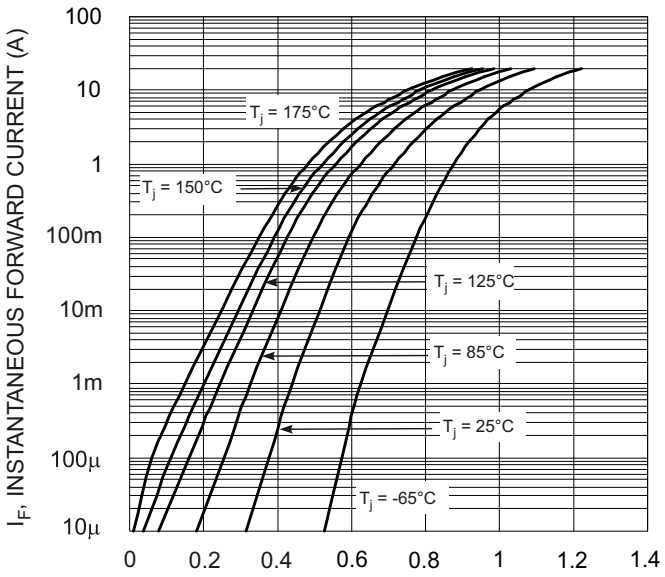

Fig. 1 Typical Forward Characteristics

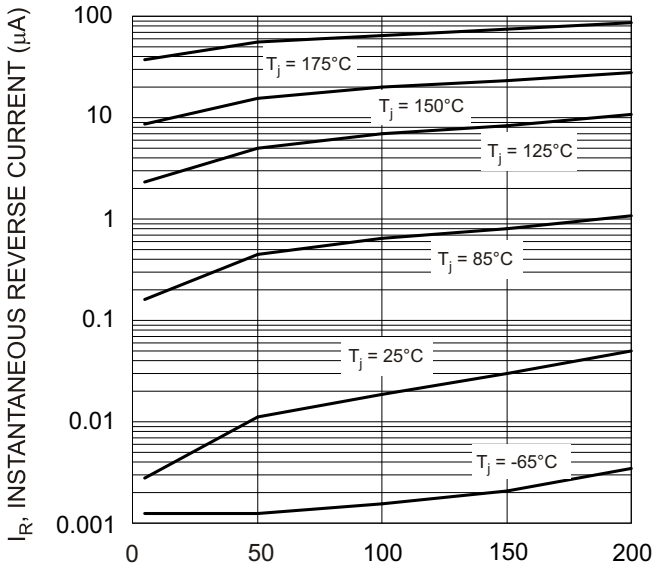

Fig. 2 Typical Reverse Characteristics

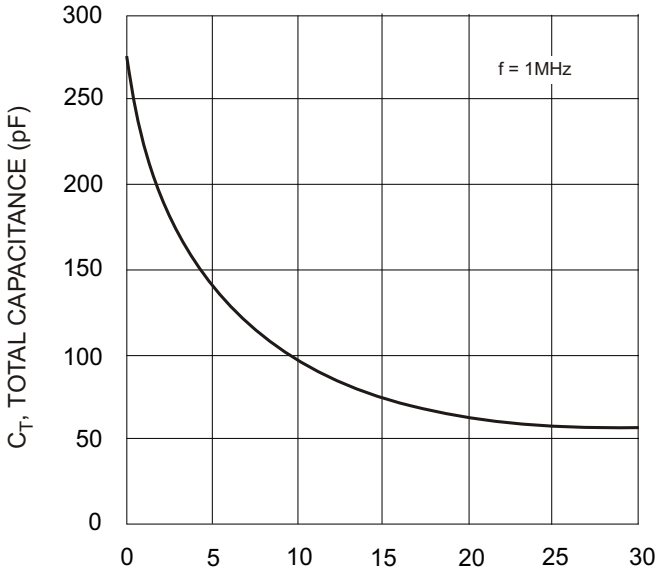

Fig. 3 Typical Total Capacitance

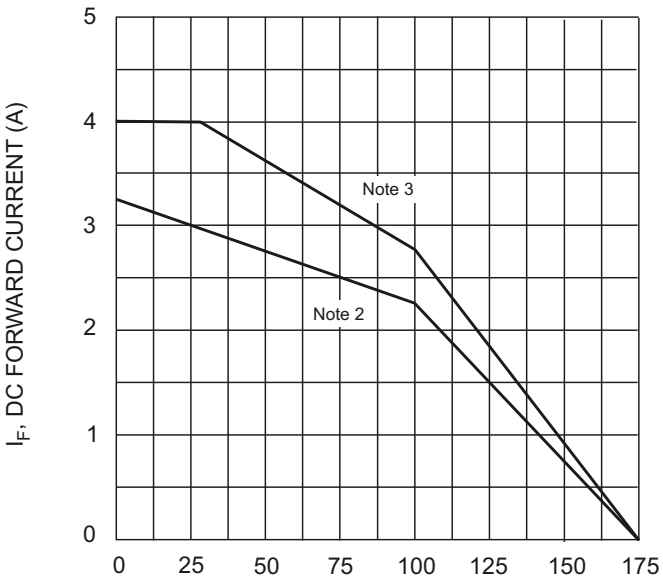

Fig. 4 DC Forward Current Derating

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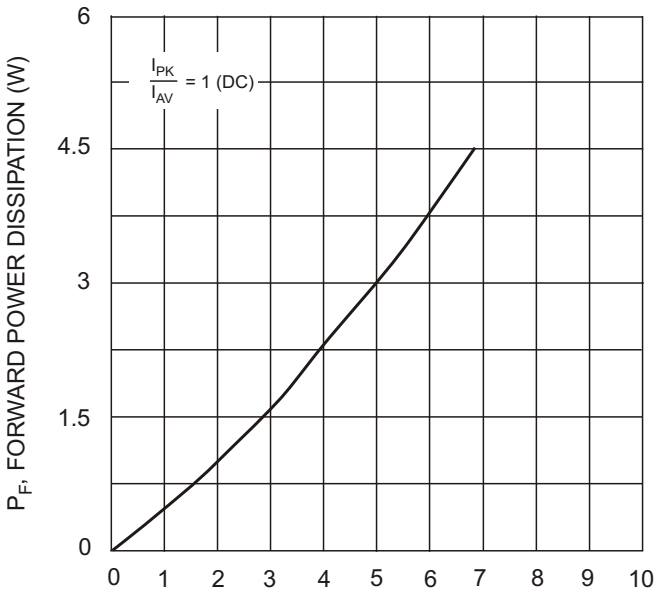


Fig. 5 Forward Power Dissipation

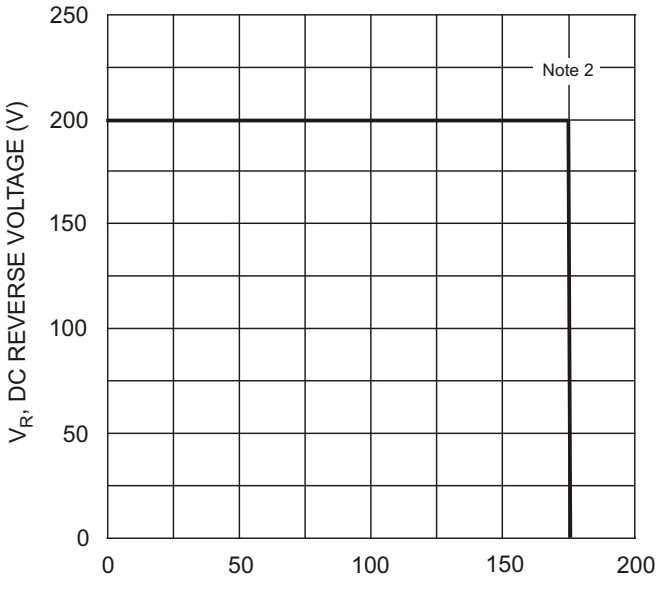
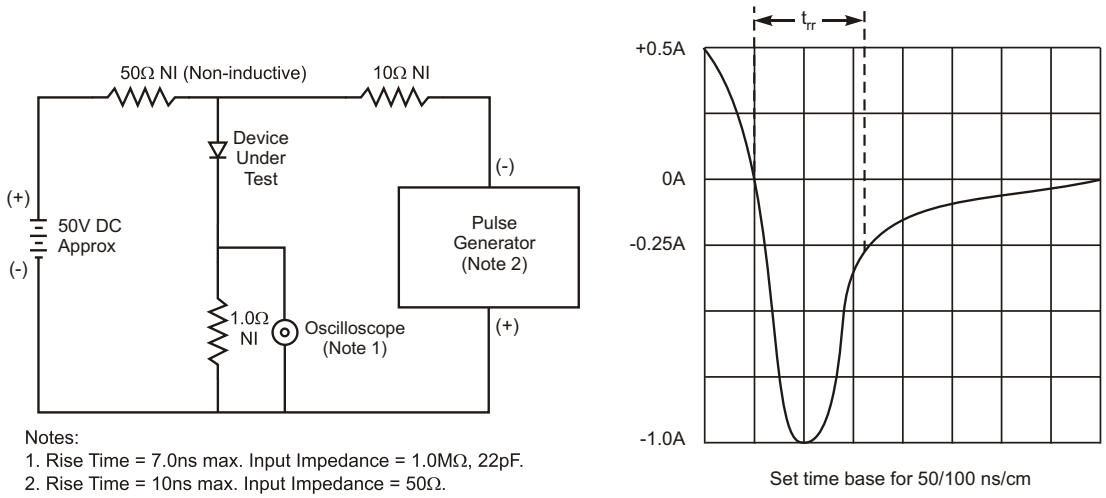


Fig. 6 Operating Temperature Derating



Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
2. Rise Time = 10ns max. Input Impedance = 50Ω.

Fig. 7 Reverse Recovery Time Characteristic and Test Circuit

Ordering Information (Note 6)

Device	Packaging	Shipping
PDU420-13	PowerDI 5	5000/Tape & Reel

Notes: 6. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

Marking Information

U420 = Product type marking code
= Manufacturers' code marking
YYWW = Date code marking
YY = Last digit of year ex: 06 for 2006
WW = Week code 01 to 52
K = Factory Designator

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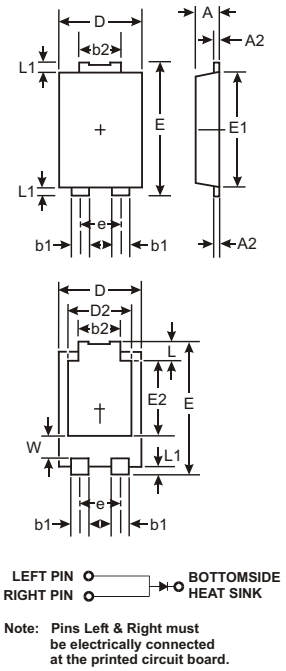
Package Outline Dimensions



Note: Pins Left & Right must be electrically connected at the printed circuit board.

PowerDI 5		
Dim	**Min**	**Max**
A	1.05	1.15
A2	0.33	0.43
b1	0.80	0.99
b2	1.70	1.88
D	3.90	4.05
D2	3.05 NOM	
E	6.40	6.60
e	1.84 NOM	
E1	5.30	5.45
E2	3.55 NOM	
L	0.75	0.95
L1	0.50	0.65
W	1.20	1.50
All Dimensions in mm		

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