

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	DFLR1200	DFLR1400	DFLR1600	Units
Peak Repetitive Reverse Voltage	V _{RRM}	200	400	600	V
Working Peak Reverse Voltage	V _{RWM}				
DC Blocking Voltage	V _R				
RMS Reverse Voltage	V _{R(RMS)}	140	280	420	V
Average Rectified Output Current (See Figure 4)	I _O	1.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	25			A

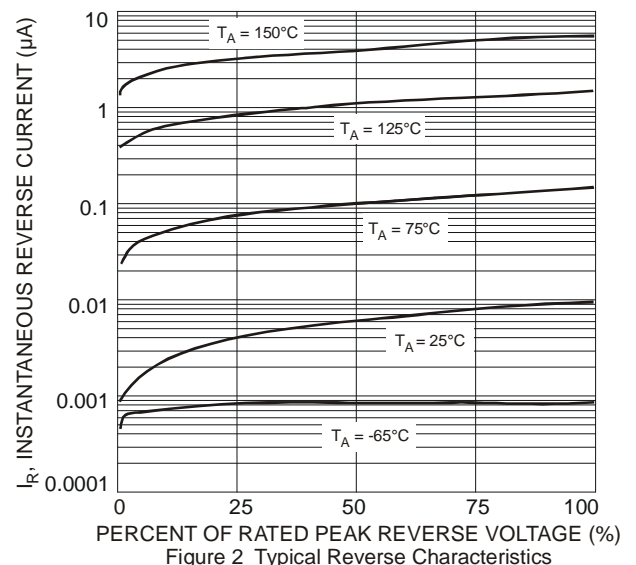
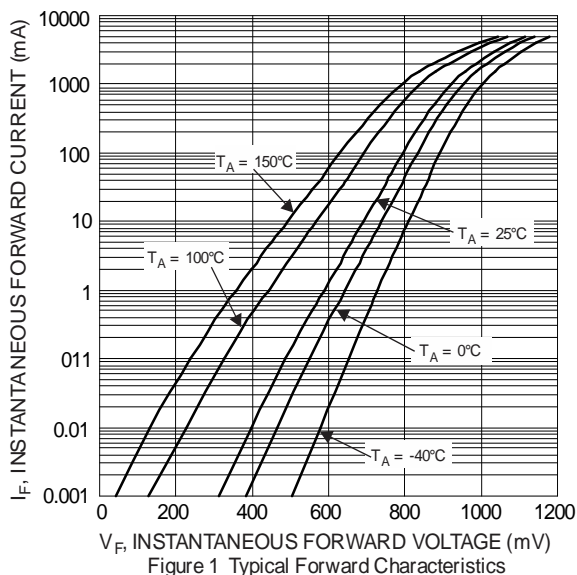
Thermal Characteristics

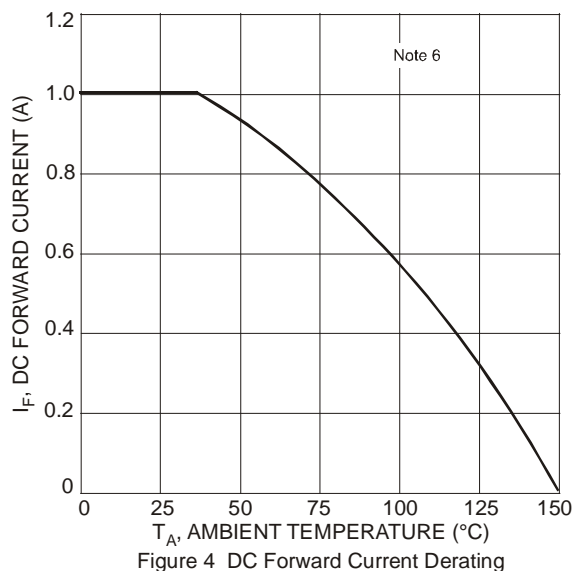
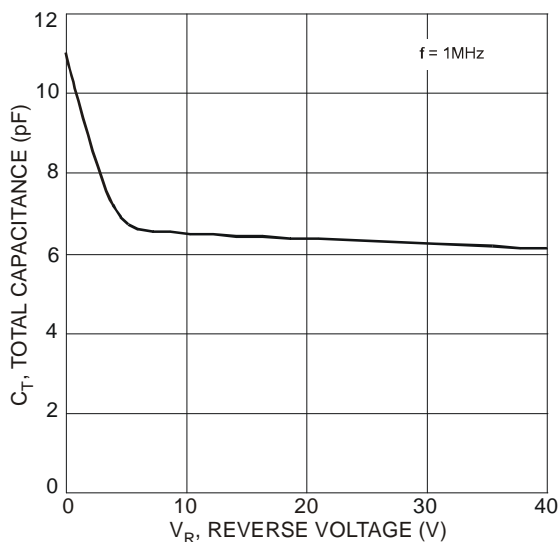
Characteristic	Symbol	Typ	Max	Unit
Thermal Resistance, Junction to Ambient Air (Note 5)	R _{θJA}	134	—	°C/W
Thermal Resistance, Junction to Soldering Point (Note 6)	R _{θJS}	—	6	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	—	-65 to +150	°C

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

Characteristic	Symbol	DFLR1200	DFLR1400	DFLR1600	Unit
Minimum Reverse Breakdown Voltage (Note 7) @I _R =10μA	V _{(BR)R}	200	400	600	V
Maximum Forward Voltage Drop @ I _F = 1.0A	V _F	1.1			V
Peak Reverse Leakage Current @ T _A = +25°C at Rated DC Blocking Voltage @ T _A = +125°C	I _R	3.0 100			μA
Typical Total Capacitance (f = 1MHz, V _R = 4.0VDC)	C _T	10			pF

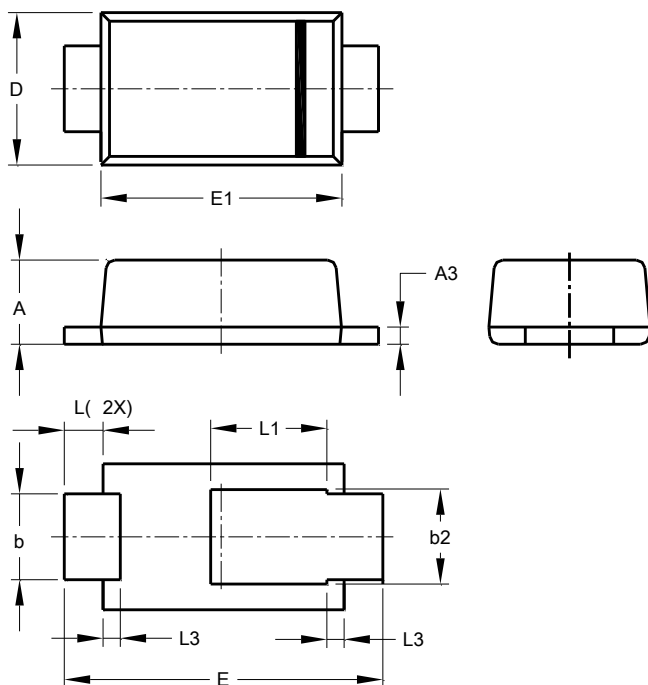
Notes: 5. Theoretical R_{θJS} calculated from the top center of the die straight down to the PCB/cathode tab solder junction.
 6. Device mounted on 1in x 1in, FR-4 PCB; 2 oz Cu pad layout as shown on Diodes Incorporated's suggested pad layout document AP02001.pdf.
 7. Short duration pulse test used to minimize self-heating effect.





Package Outline Dimensions

Please see AP02002 at <http://www.diodes.com/datasheets/ap02002.pdf> for the latest version.

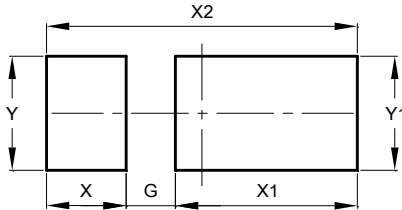


POWERDI®123			
Dim	Min	Max	Typ
A	0.93	1.00	0.98
A3	0.15	0.25	0.20
b	0.85	1.25	1.00
b2	1.025	1.125	1.10
D	1.63	1.93	1.78
E	3.50	3.90	3.70
E1	2.60	3.00	2.80
L	0.40	0.50	0.45
L1	1.25	1.40	1.35
L3	0.125	0.275	0.20
All Dimensions in mm			

Suggested Pad Layout

Please see AP02001 at <http://www.diodes.com/datasheets/ap02001.pdf> for the latest version.

POWERDI®123



Dimensions	Value (in mm)
G	0.65
X	1.05
X1	2.40
X2	4.10
Y	1.50
Y1	1.50

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