

**Maximum Ratings** (@T<sub>A</sub> = +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	V <sub>RRM</sub>	100	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>RM</sub>		
Average Rectified Output Current	I <sub>O</sub>	15	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	100	A
Repetitive Peak Avalanche Power (1μs, +25°C)	P <sub>ARM</sub>	2800	W
Non-Repetitive Avalanche Energy (T <sub>J</sub> = +25°C, I <sub>AS</sub> = 7.5A, L = 10mH)	E <sub>AS</sub>	192	mJ

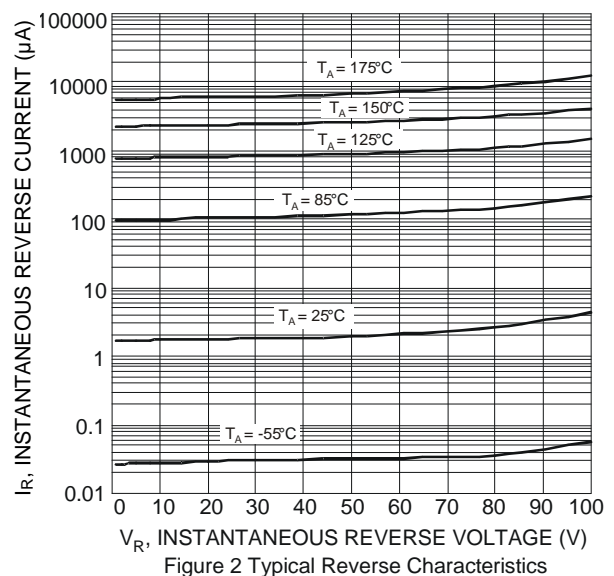
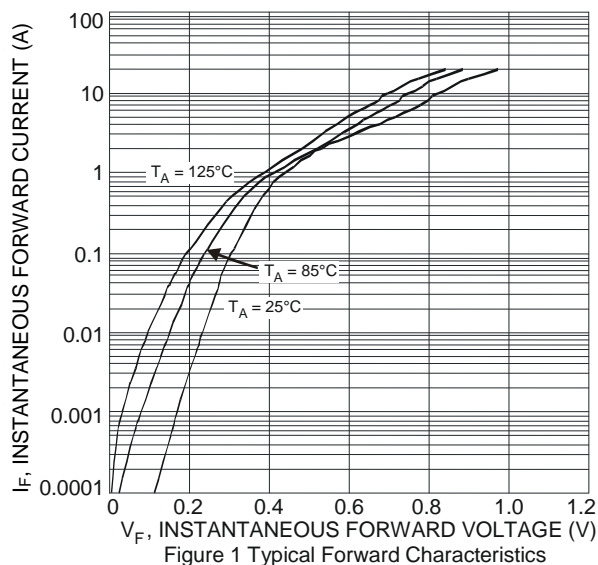
**Thermal Characteristics**

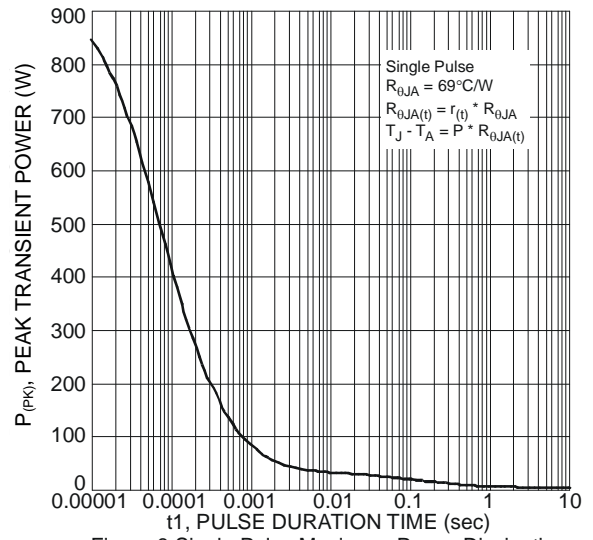
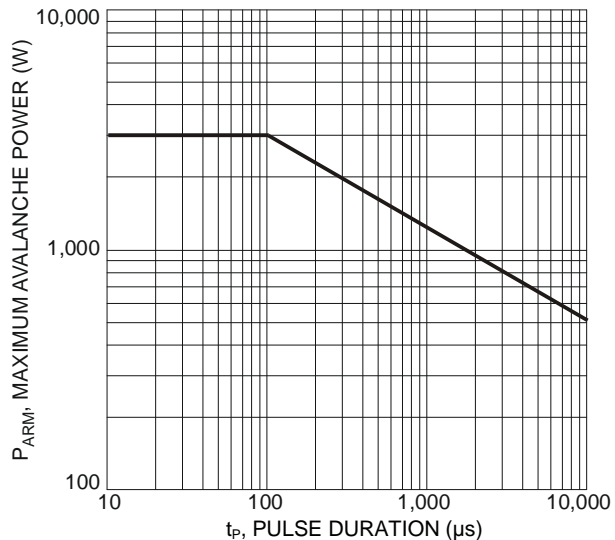
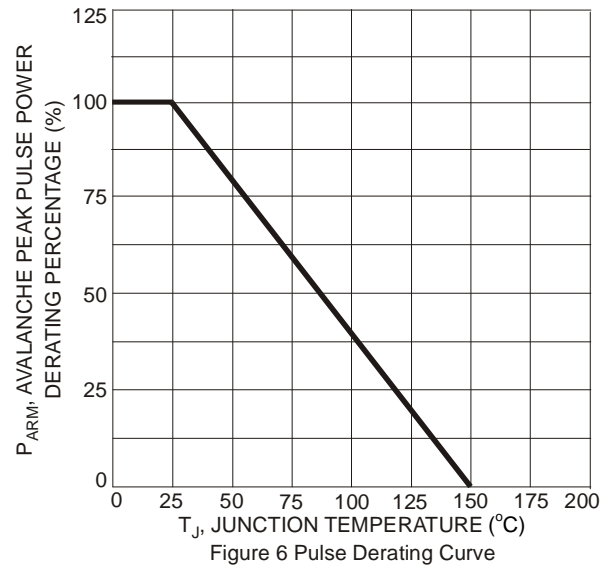
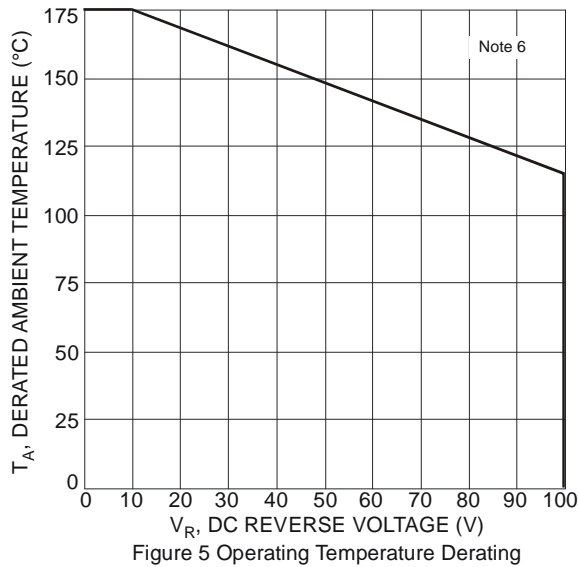
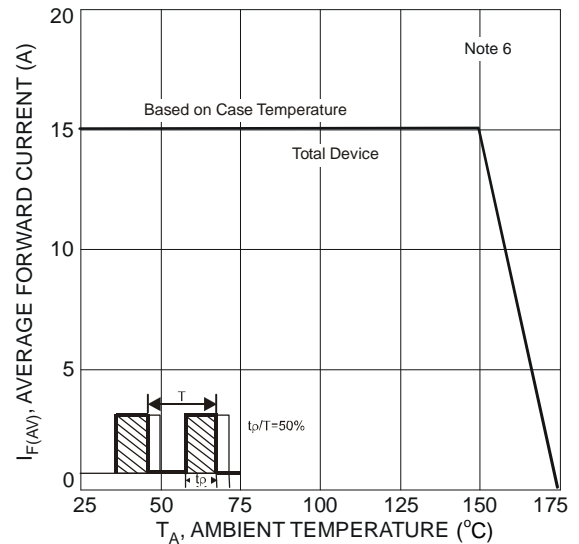
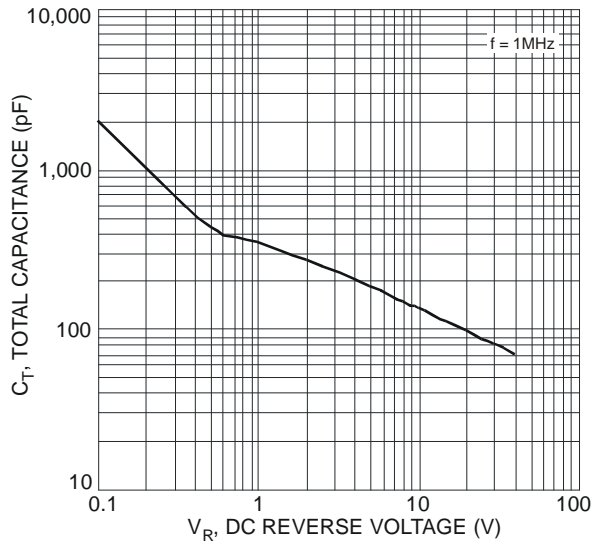
Characteristic	Symbol	Value	Unit
Typical Thermal Resistance (Per Leg)	R <sub>θJC</sub>	2	°C/W
Thermal Resistance Junction to Case (Note 6)			
Operating and Storage Temperature Range (Note 7)	T <sub>J</sub> , T <sub>STG</sub>	-55 to +175	°C

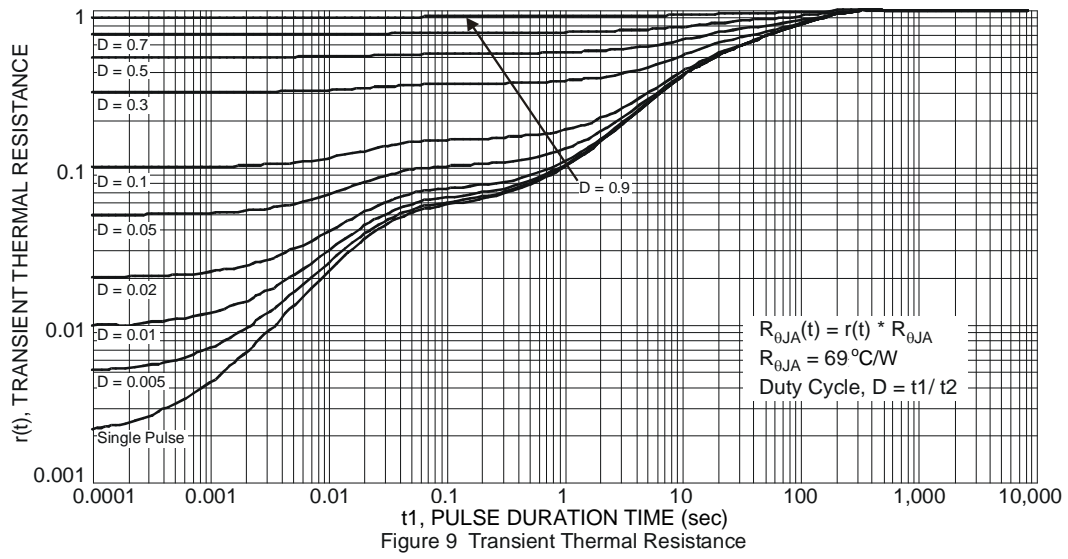
**Electrical Characteristics** (@T<sub>A</sub> = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage Drop	V <sub>F</sub>	—	—	0.80	V	I <sub>F</sub> = 7.5A, T <sub>J</sub> = +25°C I <sub>F</sub> = 7.5A, T <sub>J</sub> = +125°C
Leakage Current (Note 8)	I <sub>R</sub>	—	—	0.10	mA	V <sub>R</sub> = 100V, T <sub>J</sub> = +25°C V <sub>R</sub> = 100V, T <sub>J</sub> = +125°C
		—	1.5	3.0		

- Notes: 6. Polyimide PCB 2 oz. Copper, minimum recommended pad layout as shown on Diodes Incorporated's suggested pad layout document, which can be found on our website at <http://www.diodes.com/package-outlines.html>.  
 7. Thermal runaway must be avoided with adequate thermal dissipation design in applications. The heat generated must be less than the thermal dissipated from Junction to Ambient:  $dP/dT_J < 1/R_{\theta JA}$ .  
 8. Short duration pulse test used to minimize self-heating effect.



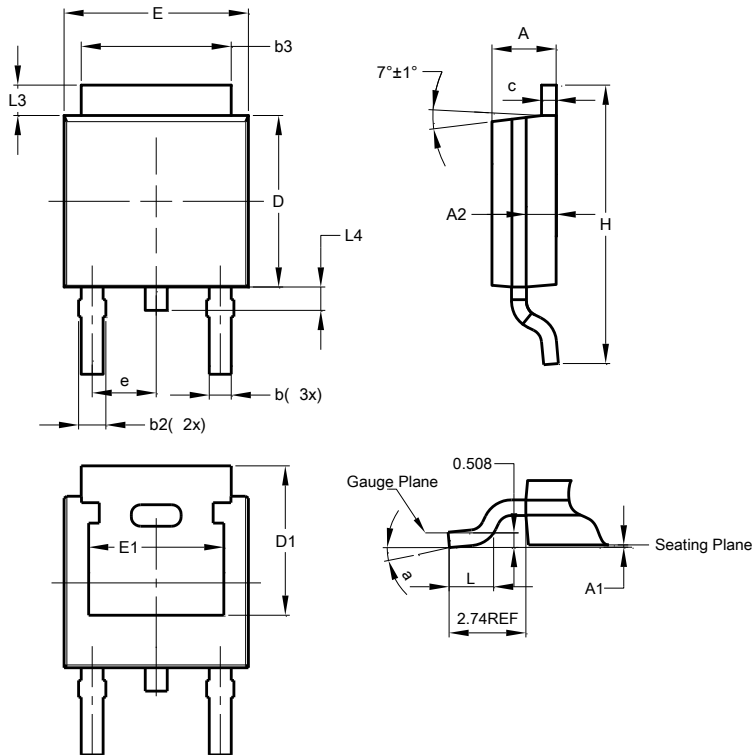




## Package Outline Dimensions

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

### TO252 (DPAK)

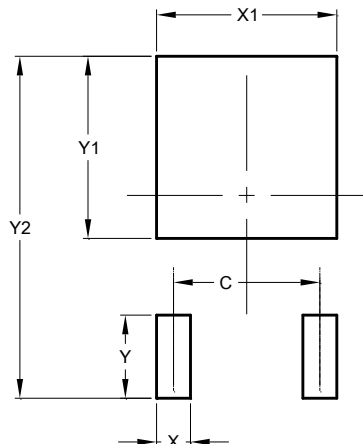


TO252 (DPAK)			
Dim	Min	Max	Typ
A	2.19	2.39	2.29
A1	0.00	0.13	0.08
A2	0.97	1.17	1.07
b	0.64	0.88	0.783
b2	0.76	1.14	0.95
b3	5.21	5.46	5.33
c	0.45	0.58	0.531
D	6.00	6.20	6.10
D1	5.21	-	-
e	-	-	2.286
E	6.45	6.70	6.58
E1	4.32	-	-
H	9.40	10.41	9.91
L	1.40	1.78	1.59
L3	0.88	1.27	1.08
L4	0.64	1.02	0.83
a	0°	10°	-
All Dimensions in mm			

## Suggested Pad Layout

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

### TO252 (DPAK)



Dimensions	Value (in mm)
C	4.572
X	1.060
X1	5.632
Y	2.600
Y1	5.700
Y2	10.700

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