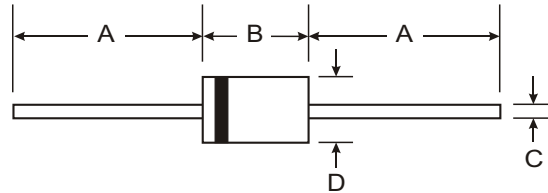


Features

- Glass Passivated Die Construction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Lead Free Finish, RoHS Compliant (Note 4)**



Mechanical Data

- Case: T1
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Polarity: Cathode Band
- Terminals: Finish – Tin. Solderable per MIL-STD-202, Method 208 **e3**
- Marking: Type Number
- Weight: 0.13 grams (approximate)

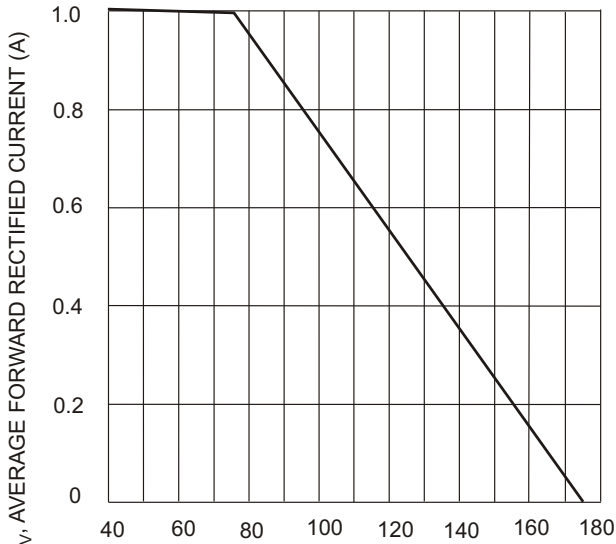
T-1		
Dim	Min	Max
A	25.40	
B	2.60	3.20
C	0.53	0.64
D	2.20	2.60
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ T_A = 25 C unless otherwise specified

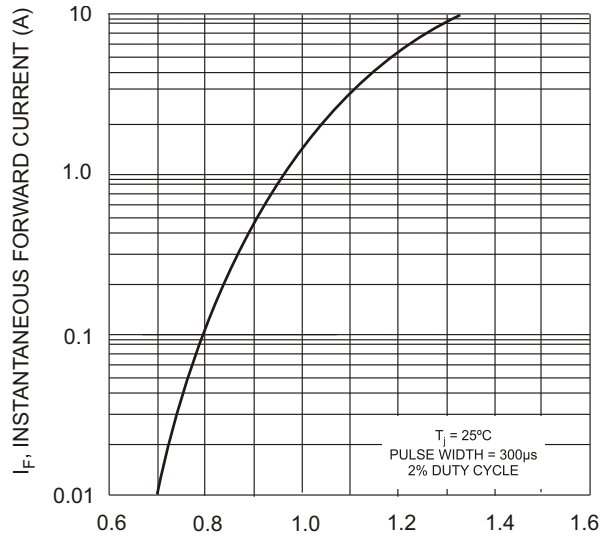
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	D1G	D2G	D3G	D4G	D5G	D6G	D7G	Unit
Peak Repetitive Reverse Voltage	V _{RRM}								
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1)	I _O	1.0							A
		@ T _A = 75 C							
Non-Repetitive Peak Forward Surge Current	I _{FSM}	30							A
		8.3ms Single half sine-wave superimposed on rated load							
Forward Voltage	V _{FM}	1.0							V
		@ I _F = 1.0A							
Peak Reverse Current	I _{RM}	5.0							A
		@ T _A = 25 C							
		@ T _A = 100 C							
Reverse Recovery Time (Note 3)	t _{rr}	2.0							s
Typical Total Capacitance (Note 2)	C _T	8.0							pF
Typical Thermal Resistance Junction to Ambient	R _{JA}	100							C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150							C

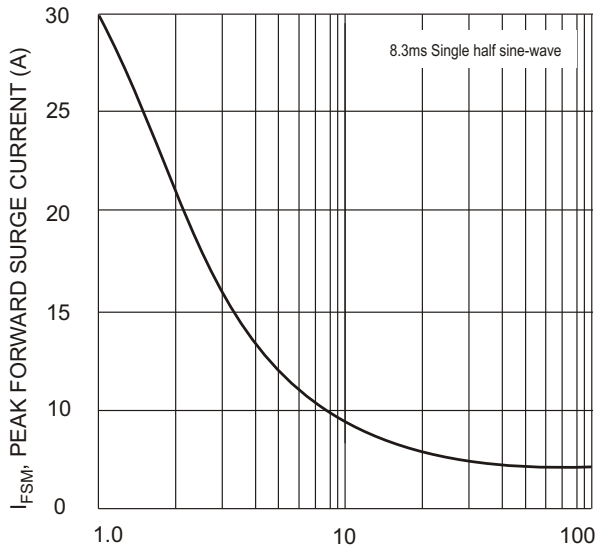
- Notes:
- Valid provided that leads are maintained at ambient temperature at a distance of 9.5mm from the case.
 - Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 - Measured with I_F = 0.5A, I_R = 1A, I_{rr} = 0.25A.
 - RoHS revision 13.2.2003. Glass and High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 5 and 7.



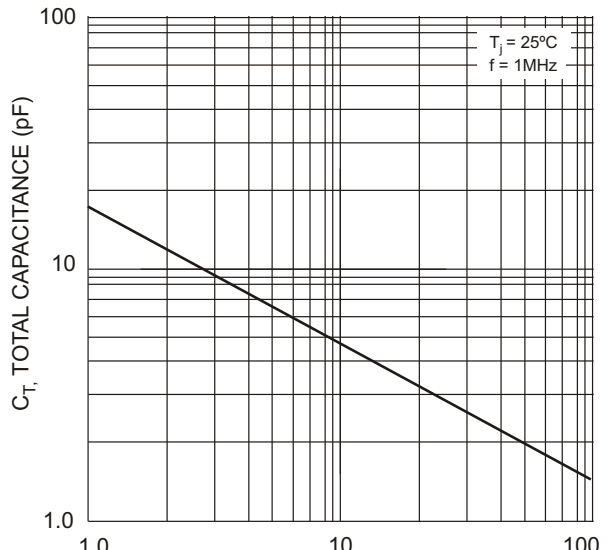
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



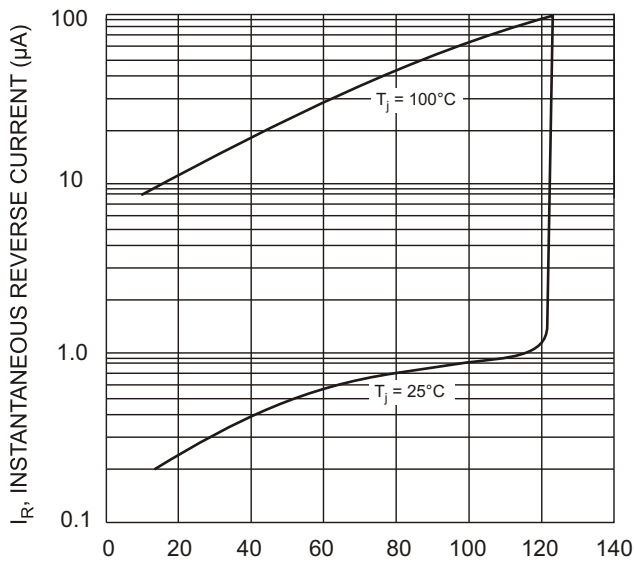
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Forward Surge Current



V_R , REVERSE VOLTAGE (V)
Fig. 4 Typical Total Capacitance



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 5 Typical Reverse Characteristics

Ordering Information (Note 5)

Device	Packaging	Shipping
D1G-T	T-1	5K/Tape & Reel, 13-inch
D2G-T	T-1	5K/Tape & Reel, 13-inch
D3G-T	T-1	5K/Tape & Reel, 13-inch
D4G-T	T-1	5K/Tape & Reel, 13-inch
D5G-T	T-1	5K/Tape & Reel, 13-inch
D6G-T	T-1	5K/Tape & Reel, 13-inch
D7G-T	T-1	5K/Tape & Reel, 13-inch

Notes: 5. For packaging details, visit our website at <http://www.diodes.com/datasheets/ap02008.pdf>.

IMPORTANT NOTICE

Diodes Incorporated and its subsidiaries reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. Diodes Incorporated does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

Diodes Incorporated products are not authorized for use as critical components in life support devices or systems without the expressed written approval of the President of Diodes Incorporated.