

## Features and Benefits

- Glass Passivated Die Construction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- **Lead Free Finish, RoHS Compliant (Note 1)**

## Mechanical Data

- Case: T1
- Case Material: Molded Plastic. UL Flammability
- Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Polarity: Cathode Band
- Terminals: Finish – Tin. Solderable per MIL-STD-202, Method 208 (E3)
- Marking: Type Number
- Weight: 0.13 grams (approximate)

## Ordering Information (Note 2)

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

## Maximum Ratings and Electrical Characteristics $\text{@ } T_A = 25^\circ\text{C}$ 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 3)	$I_O$								A
$\text{@ } T_A = 75^\circ\text{C}$									
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load	$I_{FSM}$								A
Forward Voltage $\text{@ } I_F = 1.0\text{A}$	$V_{FM}$								V
Peak Reverse Current $\text{@ } T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage	$I_{RM}$								$\mu\text{A}$
$\text{@ } T_A = 100^\circ\text{C}$									
Typical Reverse Recovery Time (Note 4)	$t_{rr}$								$\mu\text{s}$
Typical Total Capacitance (Note 5)	$C_T$								$\text{pF}$
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$								$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STC}$								$^\circ\text{C}$
		-65 to +150							

Notes:

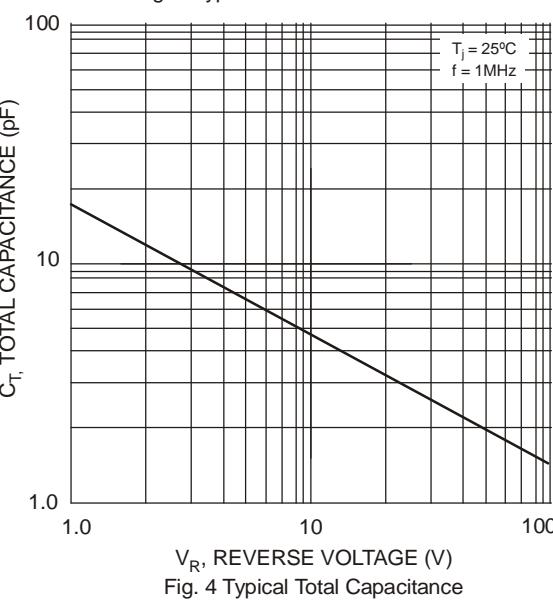
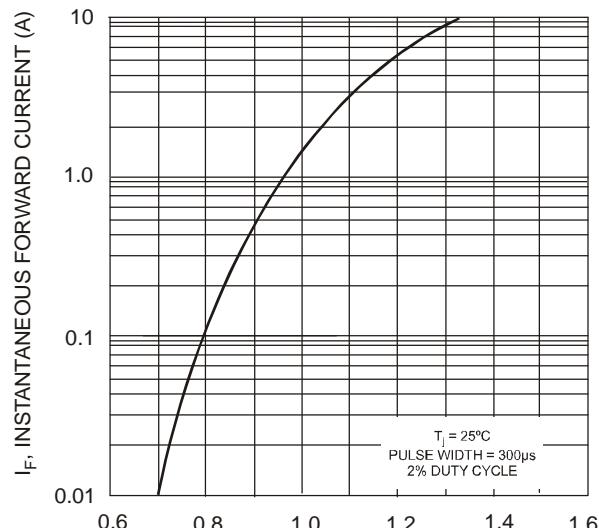
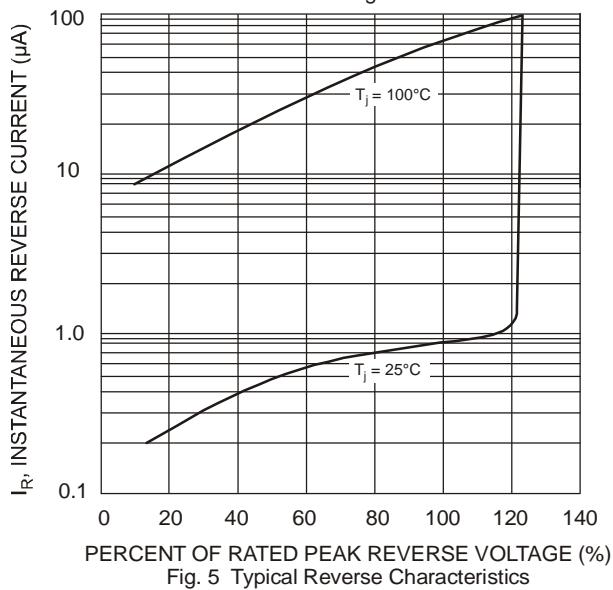
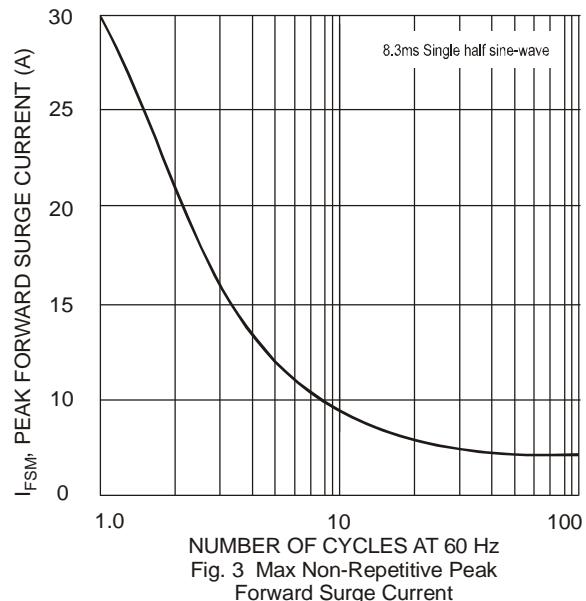
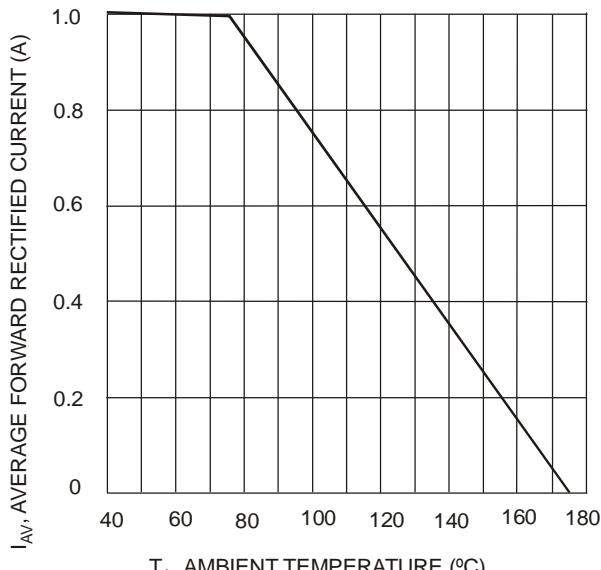
1. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes

2. For packaging details, visit our website at <http://www.diodes.com>.

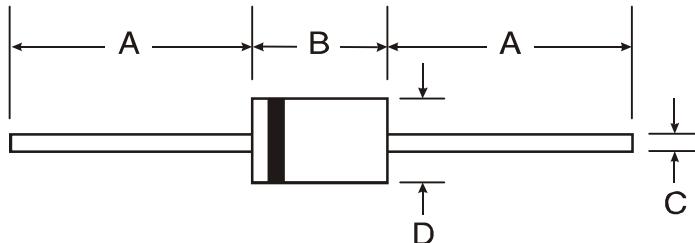
3. Valid provided that leads are maintained at ambient temperature at a distance of 9.5mm from the case.

4. Measured with  $I_F = 0.5\text{A}$ ,  $I_R = 1\text{A}$ ,  $I_{rr} = 0.25\text{A}$ .

5. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.



## Package Outline Dimensions



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

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