

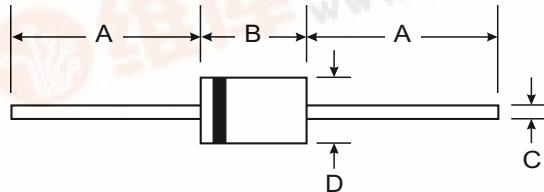


D1G - D7G

1.0A GLASS PASSIVATED RECTIFIER

Features

- Glass Passivated Die Construction
- Diffused Junction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 30A Peak
- Plastic Material: UL Flammability Classification Rating 94V-0



Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: Type Number
- Weight: 0.13 grams (approx.)

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

• $T_A = 25^\circ\text{C}$ 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 Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) • $T_A = 75^\circ\text{C}$	I_O				1.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}				30				A
Forward Voltage • $I_F = 1.0\text{A}$	V_{FM}				1.0				V
Peak Reverse Current • $T_A = 25^\circ\text{C}$ • $T_A = 100^\circ\text{C}$	I_{RM}				5.0	50			μA
Reverse Recovery Time (Note 3)	t_{rr}				2.0				μs
Typical Junction Capacitance (Note 2)	C_j				8.0				pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$				100				K/W
Operating and Storage Temperature Range	T_j, T_{STG}				-65 to +150				$^\circ\text{C}$

Notes:

1. Valid provided that leads are maintained at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$.

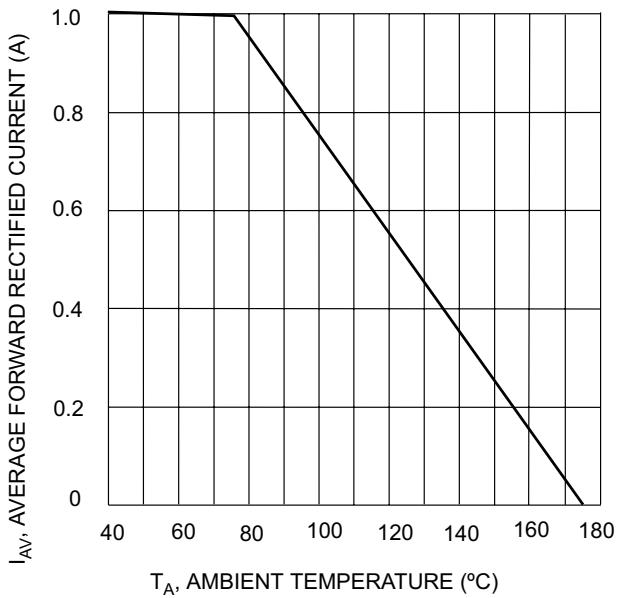


Fig. 1 Forward Current Derating Curve

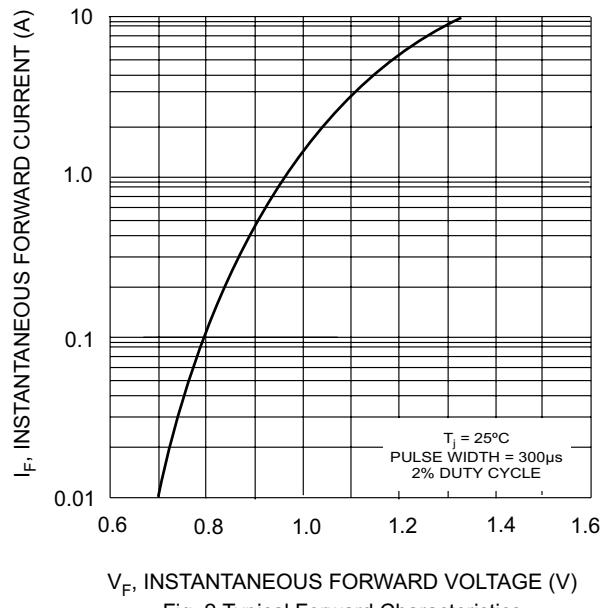


Fig. 2 Typical Forward Characteristics

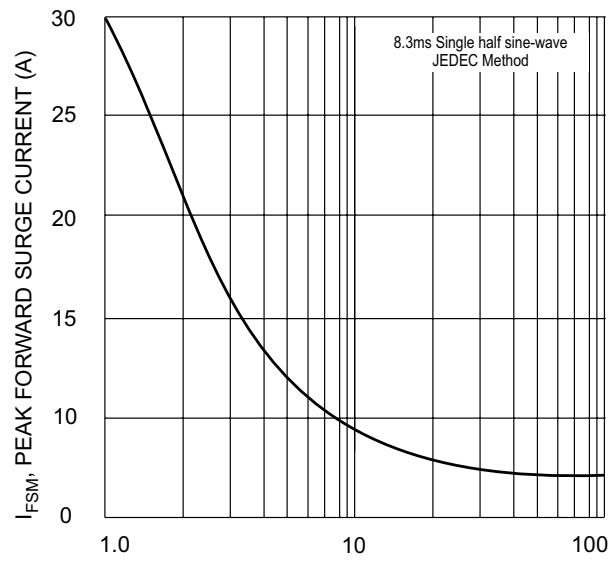


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

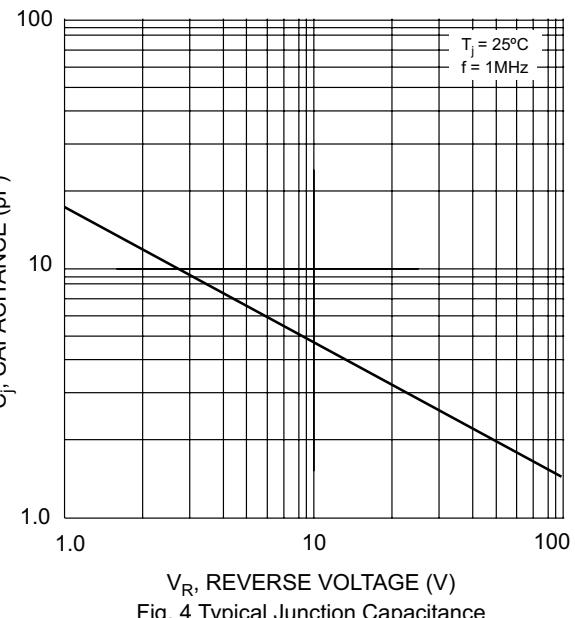


Fig. 4 Typical Junction Capacitance

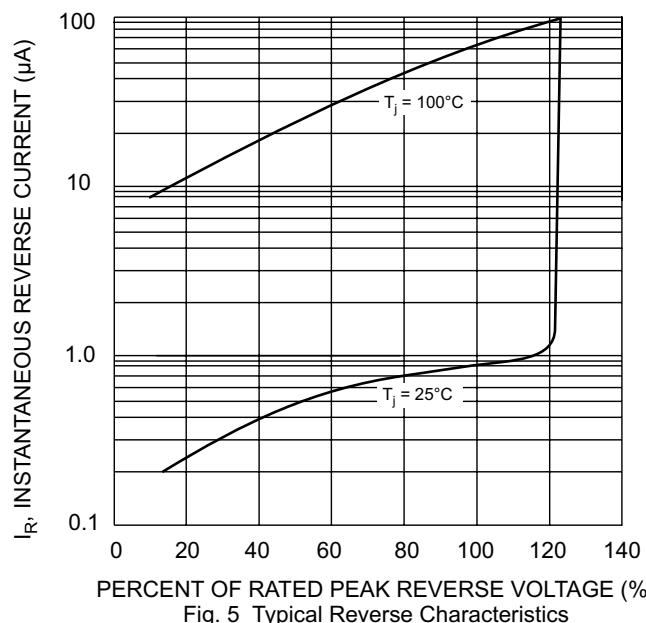


Fig. 5 Typical Reverse Characteristics