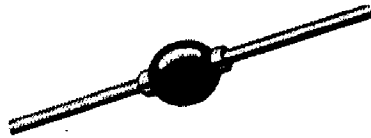
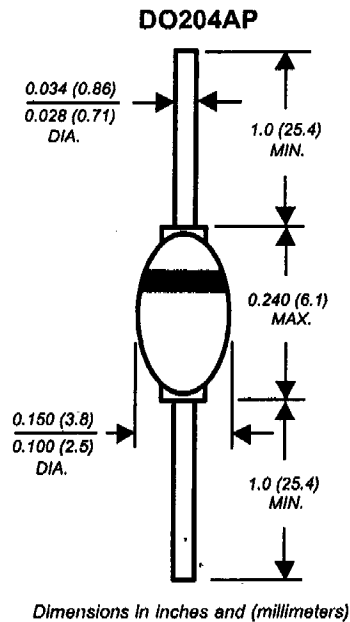


## CG1 and DG1



### Miniature Clumper/Damper Glass Passivated Rectifier

Reverse Voltage 1400 to 1500 V  
 Forward Current 1.5 A



### Features

- Specially designed for clamping circuits, horizontal deflection systems and damper applications
- High temperature metallurgically bonded construction
- Cavity-free glass passivated junction
- 1.5 ampere operation at  $T_A=50^\circ\text{C}$  with no thermal runaway
- Typical  $I_R$  less than  $0.1\mu\text{A}$
- Hermetically sealed package
- Capable of meeting environmental standards of MIL-S-19500
- High temperature soldering guaranteed:  
 $350^\circ\text{C}/10$  seconds,  $0.375''$  (9.5mm) lead length,  
 5 lbs. (2.3kg) tension

### Mechanical Data

**Case:** JEDEC DO-204AP Solid glass body  
**Terminals:** Solder plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.02 oz., 0.56 g

### Maximum Ratings & Thermal Characteristics Ratings at $25^\circ\text{C}$ ambient temperature unless otherwise specified.

Parameter	Symbols	CG1	DG1	Units
Maximum repetitive peak reverse voltage	VRRM	1400	1500	V
Maximum RMS voltage	VRMS	980	1050	V
Maximum DC blocking voltage	VDC	1400	1500	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=50^\circ\text{C}$	$I_{F(AV)}$	1.5		A
Peak forward surge current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	40		A
Maximum full load reverse current full cycle average 0.375" (9.5mm) lead length at $T_A=100^\circ\text{C}$	$I_{R(AV)}$	50		$\mu\text{A}$
Typical thermal resistance <sup>(1)</sup>	$R_{\theta JA}$	55		$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +175		$^\circ\text{C}$

### Electrical Characteristics Ratings at $25^\circ\text{C}$ ambient temperature unless otherwise specified.

Parameter	Symbols	CG1	DG1	Units
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.1		V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	5.0 100		$\mu\text{A}$
Maximum reverse recovery time at $I_F=0.5\text{A}, I_R=50\text{mA}$	$t_{rr}$	15	20	$\mu\text{s}$
Maximum reverse recovery time at $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$ typical maximum	$t_{rr}$	0.7 1.5		$\mu\text{s}$
Typical junction capacitance at 4.0V, 1MHz	$C_J$	15		pF

**Notes:**

(1) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted