

**BY268GP THRU BY269GP**

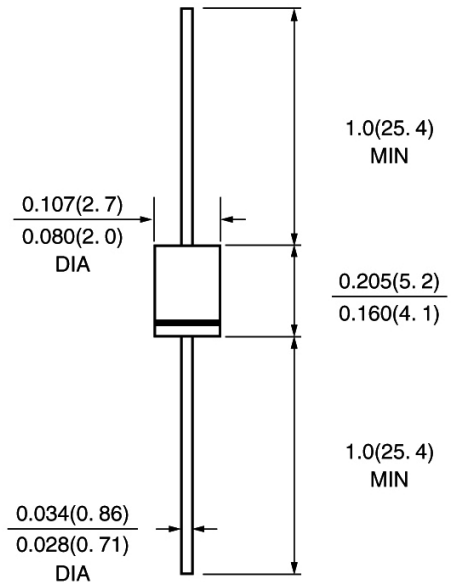
**SINTERED GLASS JUNCTION  
FAST SWITCHING PLASTIC RECTIFIER**  
VOLTAGE:1400 TO 1600V      CURRENT: 0.8A

**FEATURE**

High temperature metallurgically bonded construction  
Sintered glass cavity free junction  
Capability of meeting environmental standard of MIL-S-19500  
High temperature soldering guaranteed  
350°C/10sec/0.375"lead length at 5 lbs tension  
Operate at  $T_a = 55^\circ\text{C}$  with no thermal run away  
Typical  $I_r < 0.2\mu\text{A}$

**MECHANICAL DATA**

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy  
Polarity: color band denotes cathode  
Mounting position: any

**DO-41\DO-204AL**

Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	BY268GP	BY269GP	units
Maximum Recurrent Peak Reverse Voltage	$V_{rrm}$	1400	1600	V
Maximum RMS Voltage	$V_{rms}$	980	1120	V
Maximum DC blocking Voltage	$V_{dc}$	1400	1600	V
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	1600	1800	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_a = 55^\circ\text{C}$	$I_f(av)$	0.8		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{fsm}$	20.0		A
Maximum Forward Voltage at 0.4A and 25°C	$V_f$	1.25		V
Maximum full load reverse current full cycle Average at 55°C Ambient	$I_r(av)$	100		$\mu\text{A}$
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at rated DC blocking voltage $T_a = 150^\circ\text{C}$	$I_r$	5.0	100.0	$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	400		nS
Non Repetitive Reverse Avalanche Energy at $I_{BR(R)}=0.4\text{A}$	$E_{RSM}$	10		mJ
Typical Junction Capacitance (Note 2)	$C_j$	5.0		pF
Typical Thermal Resistance (Note 3)	$R_{th(ja)}$	65.0		$^\circ\text{C}/\text{W}$
Storage and Operating Junction Temperature	$T_{stg}, T_j$	-65 to +175		$^\circ\text{C}$

Note:

- Reverse Recovery Condition  $I_f = 0.5\text{A}$ ,  $I_r = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

Rev.A1

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**RATINGS AND CHARACTERISTIC CURVES BY268GP THRU BY269GP**

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Figure 1. Typ. Thermal Resistance vs. Lead Length

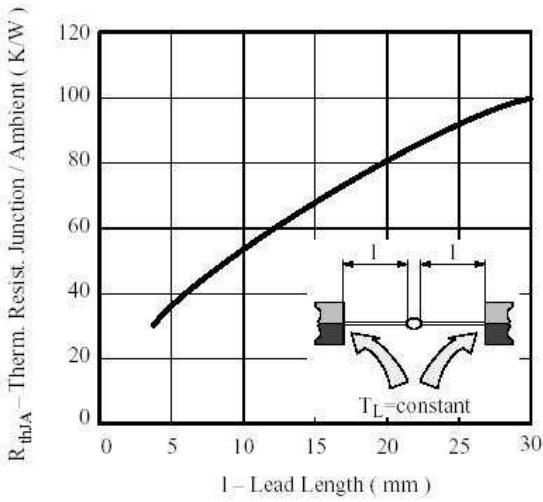


Figure 2. Reverse Current vs. Junction Temperature

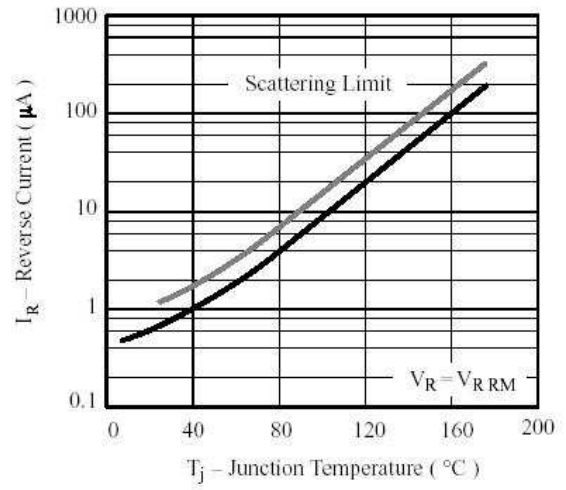


Figure 3. Typ. Forward Current vs. Forward Voltage

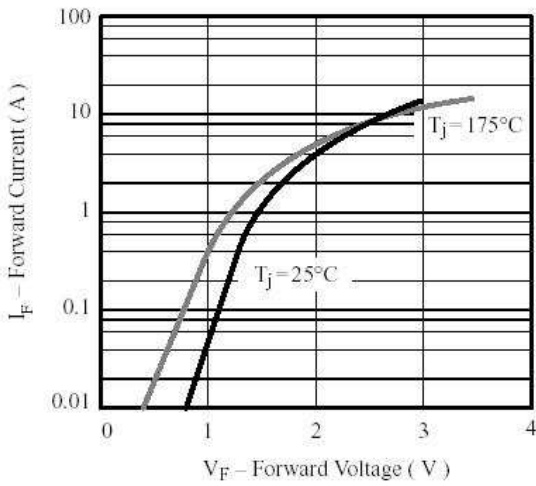


Figure 4. Typ. Diode Capacitance vs. Reverse Voltage

