

BY268GP THRU BY269GP

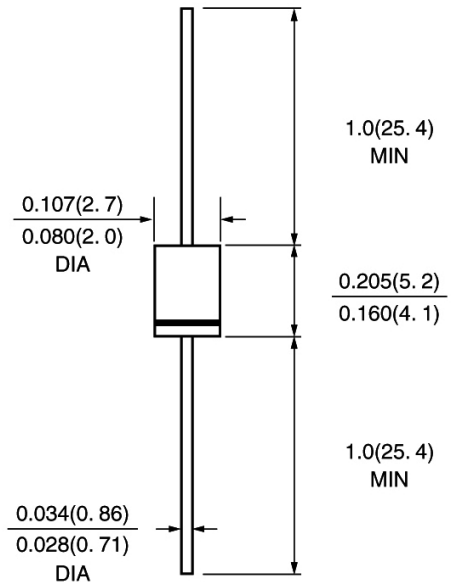
**SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER**
VOLTAGE:1400 TO 1600V CURRENT: 0.8A

**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		μA
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	μA
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

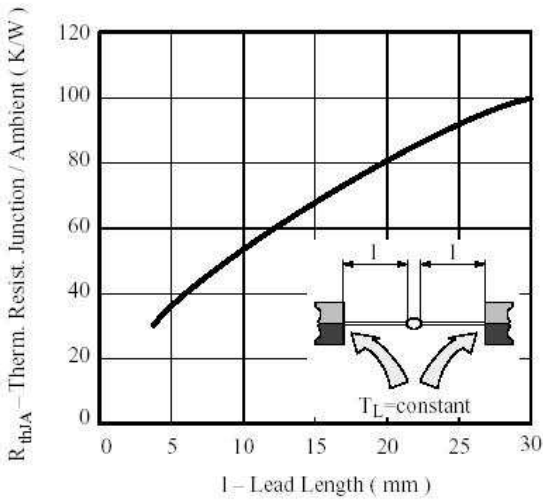


Figure 2. Reverse Current vs. Junction Temperature

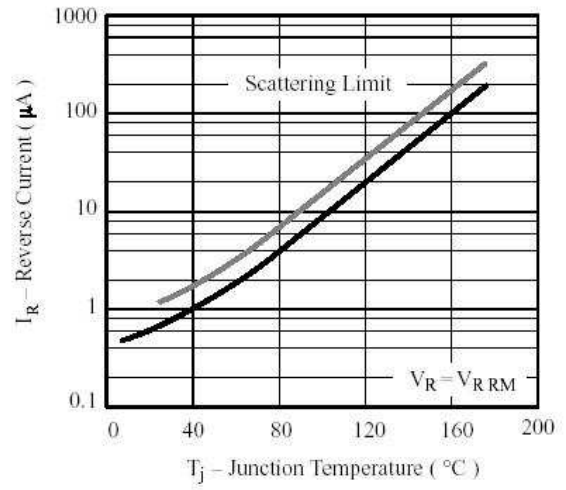


Figure 3. Typ. Forward Current vs. Forward Voltage

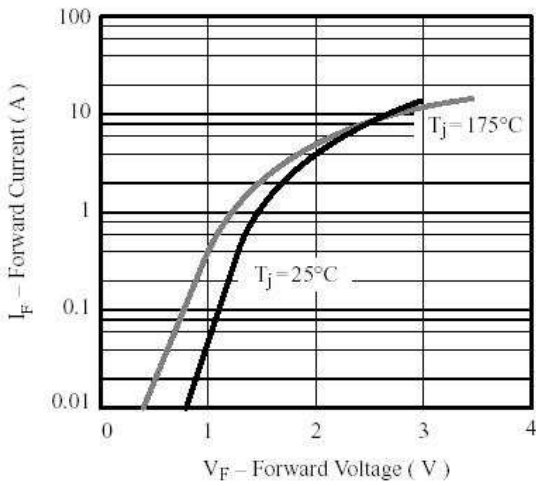


Figure 4. Typ. Diode Capacitance vs. Reverse Voltage

