## **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 Ta =55°C with no thermal run away Typical Ir<0.2µA

### **MECHANICAL DATA**

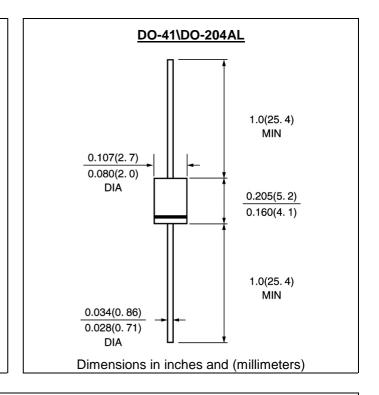
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C

Case: Molded with UL-94 Class V-0 recognized Flame

Retardant Epoxy

Polarity: color band denotes cathode

Mounting position: any



## 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	Vrrm	1400	1600	V
Maximum RMS Voltage	Vrms	980	1120	V
Maximum DC blocking Voltage	Vdc	1400	1600	V
Non-Repetitive Peak Reverse Voltage	VRSM	1600	1800	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	0.8		А
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	20.0		А
Maximum Forward Voltage at 0.4A and 25°C	Vf	1.25		V
Maximum full load reverse current full cycle Average at 55°C Ambient	Ir(av)	100		μΑ
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	Ir	5.0 100.0		μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	400		nS
Non Repetitive Reverse Avalanche Energy at I <sub>BR(R)</sub> =0.4A	E <sub>RSM</sub>	10		mJ
Typical Junction Capacitance (Note 2)	Cj	5.0		pF
Typical Thermal Resistance (Note 3)	Rth(ja)	65.0		°C /
Storage and Operating Junction Temperature	Tstg, Tj	-65 to	-65 to +175	

#### Note:

- 1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

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#### RATINGS AND CHARACTERISTIC CURVES BY268GP THRU BY269GP

Figure 1. Typ. Thermal Resistance vs. Lead Length

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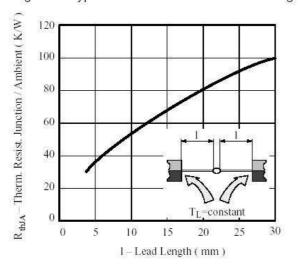


Figure 3. Typ. Forward Current vs. Forward Voltage

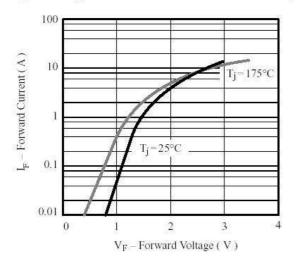


Figure 2. Reverse Current vs. Junction Temperature

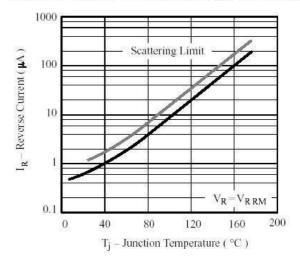
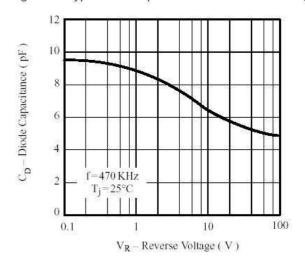


Figure 4. Typ. Diode Capacitance vs. Reverse Voltage



<sup>1</sup> Rev.A1 www.gulfsemi.com