BYV28-1GE THRU BYV28-6GE

GLASS PASSIVATED JUNCTION
ULTRAFAST EFFICIENT SILICON RECTIFIER

VOLTAGE:600V **CURRENT:3.5A**

GULF SEMI

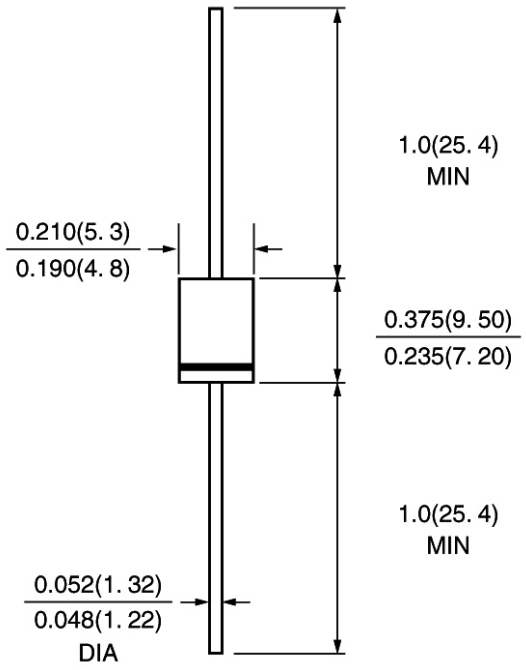
FEATURE

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
- Ultra fast recovery time for high efficiency
- Excellent high temperature switching
- Glass passivated junction
- High temperature soldering guaranteed: 250℃/10 seconds, 0.375" (9.5mm) lead length,

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body over passivated chip
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.045 oz., 1.2 g

DO−201AD



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	BYV28-1GE	BYV28-2GE	BYV28-4GE	BYV28-6GE	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	100	200	400	600	V
Maximum RMS Voltage	Vrms	70	140	280	420	V
Maximum DC blocking Voltage	Vdc	100	200	400	600	V
Maximum Average Forward Rectified Ta=25°C	If(av)	3.5				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	90				A
Maximum Forward Voltage at rated Forward Current and 25°C IF=3.5A	Vf	1.02		1.05	1.25	V
Maximum Reverse Recovery Time (Note 1)	Trr	25		50		nS
Typical thermal resistance junction to ambient (Note 2)	Rθja	72				℃/W
Maximum DC Reverse Current TJ =25°C at rated DC blocking voltage TJ =150°C	Ir	5 150				μA μA
Storage and Operating Temperature Range	Tstg, Tj	-55 to +150				°C

Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Device mounted on an epoxy-glass printed-circuit board, 1.5 mm thick; thickness of Cu-layer 40 μm, see Fig.6

For more information please refer to the “General Part of associated Handbook”.

RATINGS AND CHARACTERISTIC CURVES BYV28-1GE THRU BYV28-6GE

[1]

Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

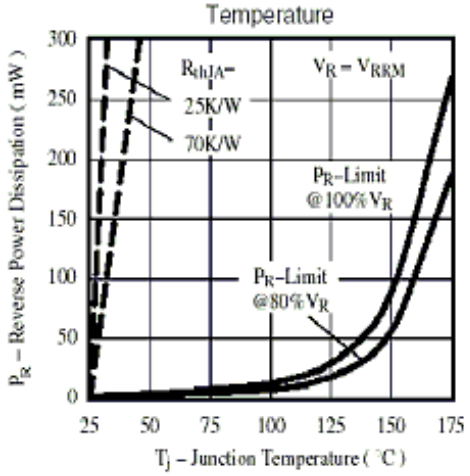


Figure 2. Max. Reverse Current vs. Junction Temperature

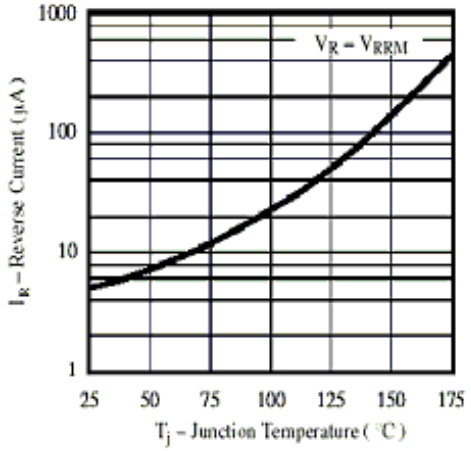


Figure 3. Max. Average Forward Current vs. Ambient Temperature

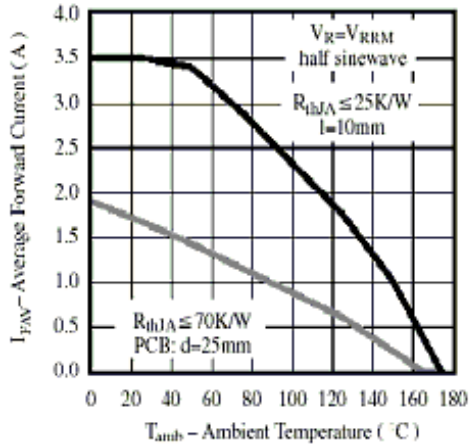


Figure 4. Max. Forward Current vs. Forward Voltage

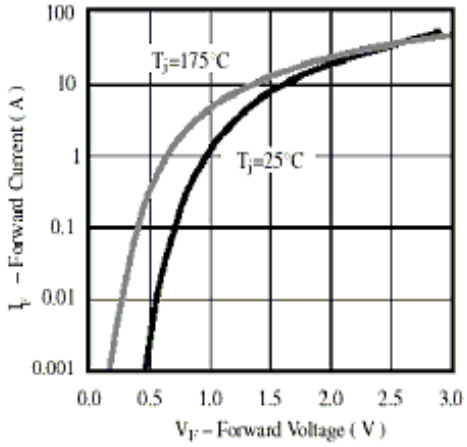


Figure 5. Typ. Diode Capacitance vs. Reverse Voltage

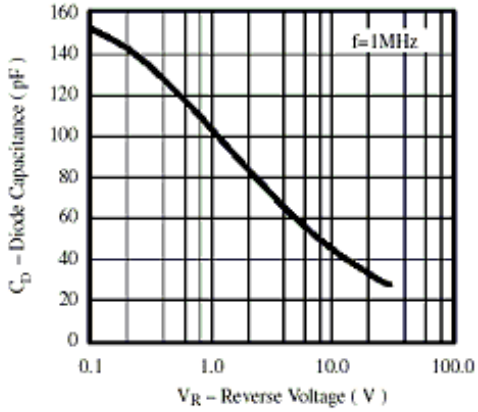
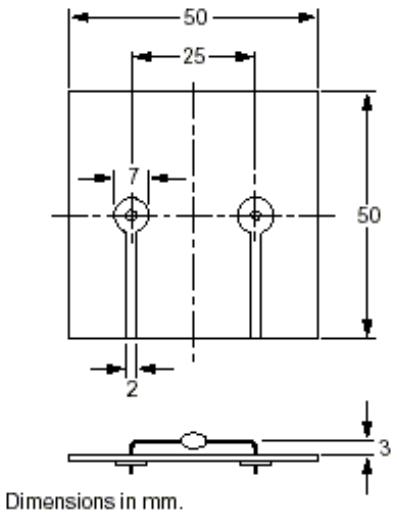


Figure 6. Device mounted on a printed-circuit board.



Dimensions in mm.

[1] Rev.A1