

# BYV28-1GE THRU BYV28-6GE

GLASS PASSIVATED JUNCTION

ULTRAFAST EFFICIENT SILICON RECTIFIER

VOLTAGE:600V

CURRENT:3.5A



## 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°C/10 seconds, 0.375" (9.5mm) lead length,

## MECHANICAL DATA

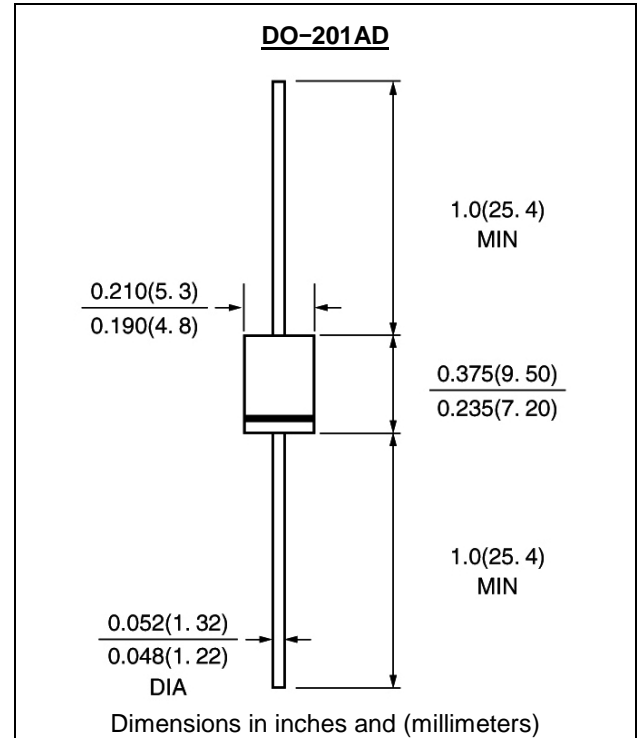
Case: JEDEC DO-201AD molded plastic body over passivated chip

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



## 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	V <sub>rrm</sub>	100	200	400	600	V
Maximum RMS Voltage	V <sub>rms</sub>	70	140	280	420	V
Maximum DC blocking Voltage	V <sub>dc</sub>	100	200	400	600	V
Maximum Average Forward Rectified T <sub>a</sub> =25°C	I <sub>f(av)</sub>	3.5				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	90				A
Maximum Forward Voltage at rated Forward Current and 25°C I <sub>F</sub> =3.5A	V <sub>f</sub>	1.02		1.05	1.25	V
Maximum Reverse Recovery Time (Note 1)	T <sub>rr</sub>	25		50		nS
Typical thermal resistance junction to ambient (Note 2)	R <sub>θja</sub>	72				°C/W
Maximum DC Reverse Current T <sub>J</sub> =25°C at rated DC blocking voltage T <sub>J</sub> =150°C	I <sub>r</sub>	5 150				μA μA
Storage and Operating Temperature Range	T <sub>stg</sub> , T <sub>J</sub>	-55 to +150				°C

Note:

1. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =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

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

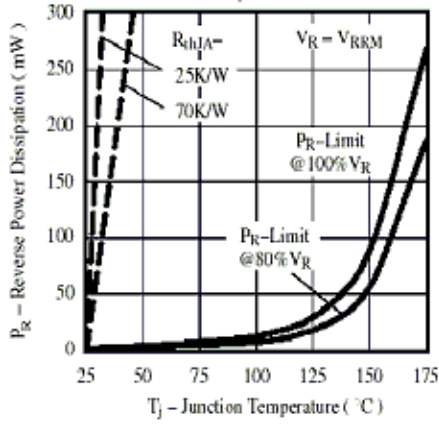


Figure 2. Max. Reverse Current vs. Junction Temperature

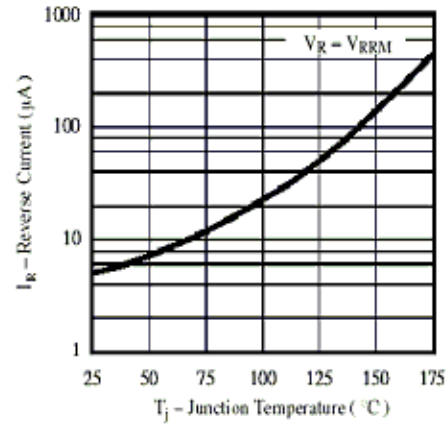


Figure 3. Max. Average Forward Current vs. Ambient Temperature

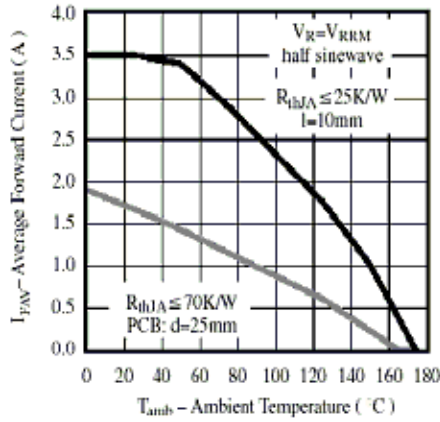


Figure 4. Max. Forward Current vs. Forward Voltage

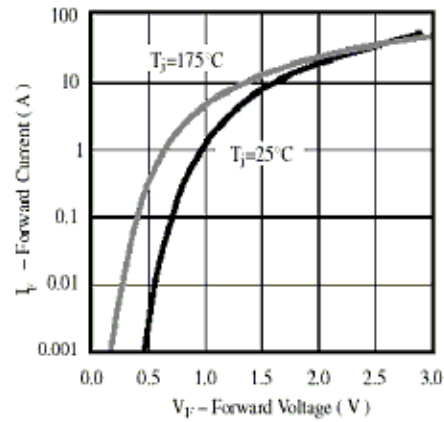


Figure 5. Typ. Diode Capacitance vs. Reverse Voltage

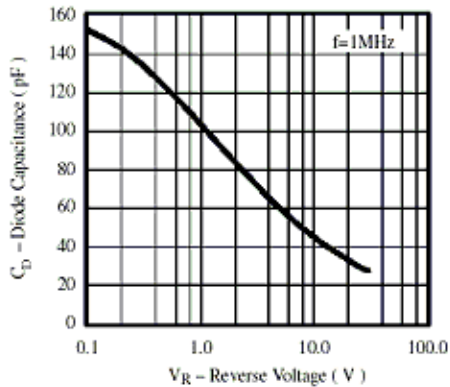


Figure 6. Device mounted on a printed-circuit board.

