

# Silicon General Purpose Bridge Rectifier

**COMCHIP**  
SMD DIODE SPECIALIST

## B05S-G thru B10S-G

Glass Passivated Type

Reverse Voltage: 50 ~ 1000 Volts

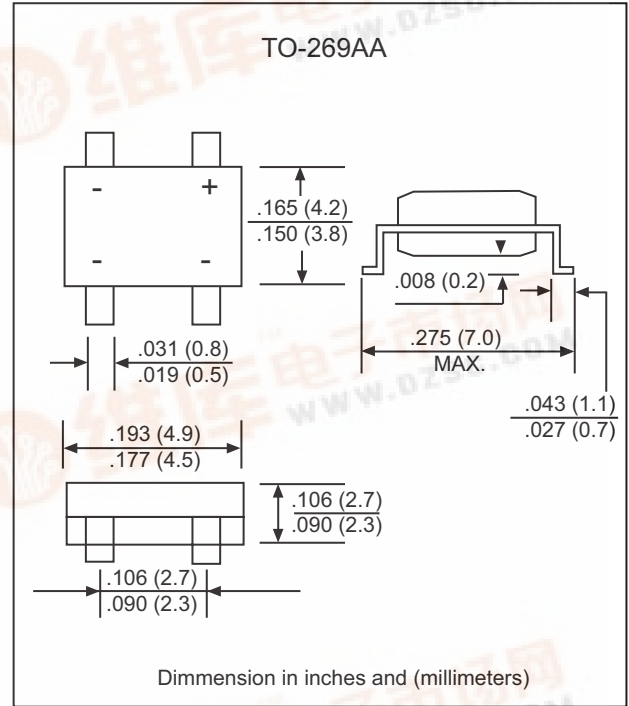
Forward Current: 0.5 Amp

### Features:

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. Flammability classification 94V-0
- Built-in strain relief
- Glass passivated junction

### Mechanical Data:

- Case: JEDEC DO-269AA molded plastic
- Terminals: solderable per MIL-STD-750, Method 2026
- Polarity: Marked on body
- Mounting position: Any
- Approx. Weight: 0.22gram



## Maximum Ratings and Electrical Characteristics

Parameter	Symbol	B05S-G	B1S-G	B2S-G	B4S-G	B6S-G	B8S-G	B10S-G	Unit
Max. Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Max. DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Max. RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Peak Surge Forward Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$				30				A
Max. Average Forward Current	$I_O$				0.5				A
Max. Instantaneous Forward Current at 0.5A	$V_F$				1.0				V
Max. DC Reverse Current at Rated DC Blocking Voltage $T_a=25^{\circ}C$ $T_a=125^{\circ}C$	$I_R$				5 500				$\mu A$
Max. Thermal Resistance (Note 1)	$R_{\theta JA}$				85				$^{\circ}C/W$
Operating Junction Temperature	$T_j$				-55 to +150				$^{\circ}C$
Storage Temperature	$T_{STG}$				-55 to +150				$^{\circ}C$

Note 1: Thermal resistance from junction to ambient.

\*-G\* suffix designated RoHS compliant version



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## B05S-G thru B10S-G

### Rating and Characteristic Curves (B05S-G thru B10S-G)

Fig. 1 - Reverse Characteristics

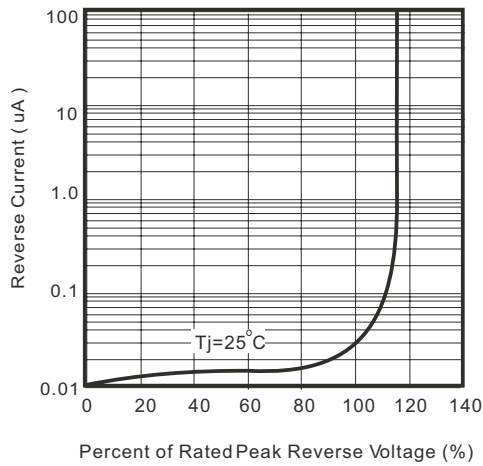


Fig.2 - Forward Characteristics

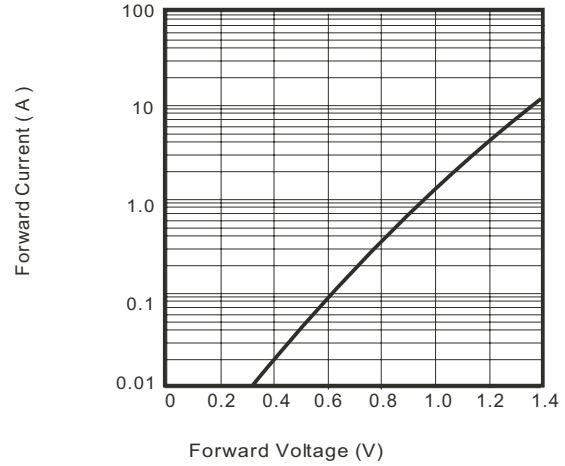


Fig. 3 - Non Repetitive Forward Surge Current

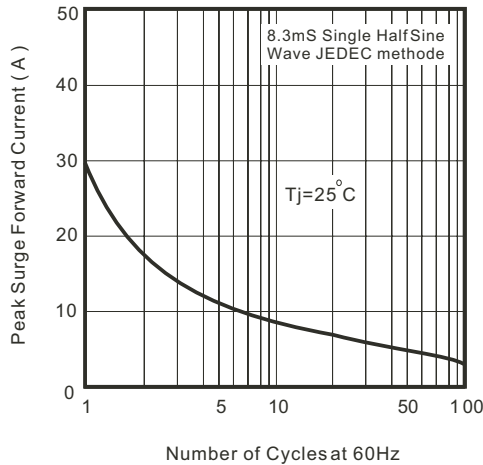


Fig. 4 - Current Derating Curve

