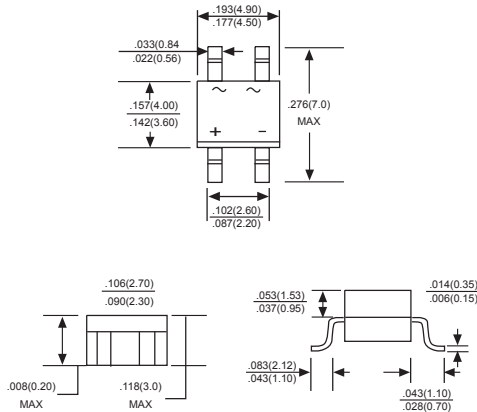


# SYB60 SERIES

## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Voltage Range - 200 to 1000 Volts Current - 0.8 Ampere

### SMT



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260° / 10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ Leads solderable per MIL-STD-202, Method 208
- ◆ High surge current capability

### MECHANICAL DATA

**Case:** Molded plastic body

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**Polarity:** Polarity symbols marked on case

**Mounting Position:** Any

**Weight:** 0.04 ounce, 1.0 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25° ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load derate current by 20%.

|                                                                                                                 | SYMBOLS       | SYB20       | SYB40 | SYB60 | SYB80 | SYB100 | UNITS              |
|-----------------------------------------------------------------------------------------------------------------|---------------|-------------|-------|-------|-------|--------|--------------------|
| Maximum repetitive peak reverse voltage                                                                         | $V_{RRM}$     | 200         | 400   | 600   | 800   | 1000   | VOLTS              |
| Maximum RMS voltage                                                                                             | $V_{RMS}$     | 140         | 280   | 420   | 560   | 700    | VOLTS              |
| Maximum DC blocking voltage                                                                                     | $V_{DC}$      | 200         | 400   | 600   | 800   | 1000   | VOLTS              |
| Maximum average forward rectified current<br>at $T_A=30^{\circ}$ On glass-epoxy P.C.B.<br>On aluminum substrate | $I_{F(AV)}$   | 0.8         |       |       |       |        | Amps               |
| Peak forward surge current,<br>8.3ms single half sine-wave superimposed on<br>rated load (JEDEC Method)         | $I_{FSM}$     | 35          |       |       |       |        | Amps               |
| Maximum instantaneous forward voltage drop<br>per leg at 0.4A                                                   | $V_F$         | 1.0         |       |       |       |        | Volts              |
| Maximum DC reverse current $T_A=25^{\circ}$<br>at rated DC blocking voltage $T_A=100^{\circ}$                   | $I_R$         | 5.0<br>100  |       |       |       |        | $\mu A$<br>$\mu A$ |
| Typical junction capacitance per leg(Note3)                                                                     | $C_J$         | 15          |       |       |       |        | pF                 |
| Typical thermal resistance per leg                                                                              | $R^{\circ}JA$ | 75          |       |       |       |        | °/W                |
| Operating temperature range                                                                                     | $T_J$         | -55 to +150 |       |       |       |        | *                  |
| storage temperature range                                                                                       | $T_{STG}$     | -55 to +150 |       |       |       |        | *                  |

## RATINGS AND CHARACTERISTIC CURVES

