

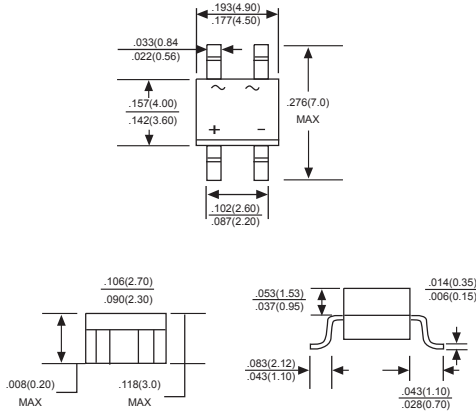


# SYB60 SERIES

## 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 at $T_A=30^*$<br>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 $T_A=25^*$<br>at rated DC blocking voltage $T_A=100^*$                         | $I_R$       | 5.0<br>100  |       |       |       |        | $\mu A$<br>$\mu A$ |
| Typical junction capacitance per leg(Note3)   | $C_J$       | 15          |       |       |       |        | pF                 |
| Typical thermal resistance per leg  | $R^*_{JA}$  | 75          |       |       |       |        | */W                |
| Operating temperature range   | $T_J$       | -55 to +150 |       |       |       |        | *                  |
| storage temperature range   | $T_{STG}$   | -55 to +150 |       |       |       |        | *                  |

# RATINGS AND CHARACTERISTIC CURVES

