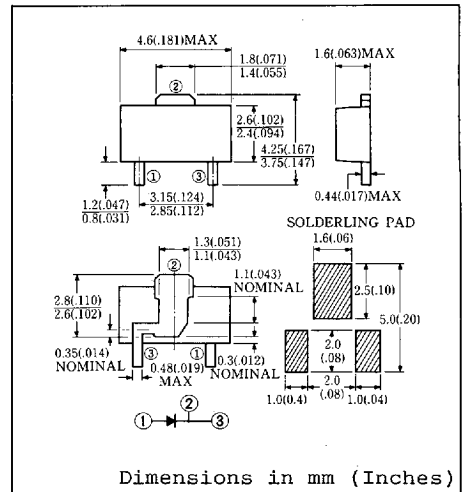


FEATURES

- Similar to TO-243AB (SOT-89) Case
- Surface Mount Device
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability
- 30 Volts through 100 Volts Types Available
- Packaged in 12mm Tape and Reel



Approx. Net Weight: 0.05 Grams

MAXIMUM RATINGS

| Voltage Rating                       | TYPE         | ◆ E10QS03   | ◆ E10QS04 | Unit       |      |
|--------------------------------------|--------------|---|-----------|------------|------|
|                                      | Symbol       |   |           |            |      |
| Repetitive Peak Reverse Voltage      | $V_{RRM}$    | 30  | 40        | v          |      |
| Non-Repetitive Peak Reverse Voltage  | $V_{RSM}$    | 35  | 45        | v          |      |
| Electrical Rating                    | Symbol       | Condition   |           | Rating     | Unit |
| Average Rectified Output Current     | $I_O$        | 180° rectangular wave conduction<br>P.C.Board mounted* $T_a = 26^\circ C$ |           | 1.1        | A    |
|                                      |              | 180° sinusoidal wave conduction<br>P.C.Board mounted* $T_a = 36^\circ C$  |           | 1.0        |      |
| RMS Forward Current                  | $I_{F(RMS)}$ |   |           | 1.57       | A    |
| Peak One-cycle Forward Surge Current | $I_{FSM}$    | 50Hz half sine wave,<br>non-repetitive                                    |           | 20         | A    |
| Operating Junction Temperature Range | $T_{jw}$     |   |           | -40 to 215 | °C   |
| Storage Temperature Range            | $T_{stg}$    |   |           | -40 to 125 | °C   |

ELECTRICAL & THERMAL CHARACTERISTICS

| Characteristics      | Symbol        | Test Condition                       |                    | Max. | Unit |
|----------------------|---------------|--------------------------------------|--------------------|------|------|
| Peak Forward Voltage | $V_{FM}$      | $I_{FM} = 1.0A$                      | $T_j = 25^\circ C$ | 0.55 | v    |
| Peak Reverse Current | $I_{RM}$      | $V_{RM} = V_{RRM}$                   | $T_j = 25^\circ C$ | 1.0  | mA   |
| Thermal Resistance   | $R_{th(j-a)}$ | Junction to Ambient, P.C.B. mounted* |                    | 110  | °C/W |

\*P.C.Board Print Land= 15x15mm

◆ For spare parts only

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

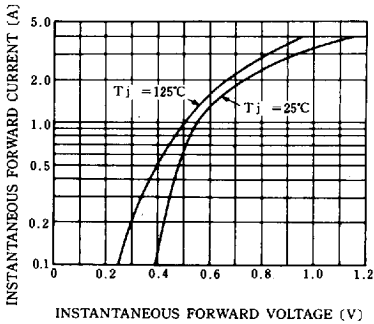


FIG.2-AVERAGE FORWARD POWER DISSIPATION

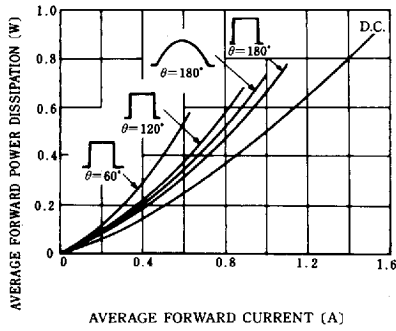


FIG.3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

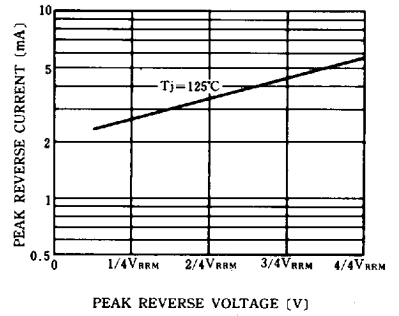


FIG.4-AVERAGE REVERSE POWER DISSIPATION (E10QS04) (E10QS03 IS FOR 75% RATED REVERSE POWER DISSIPATION)

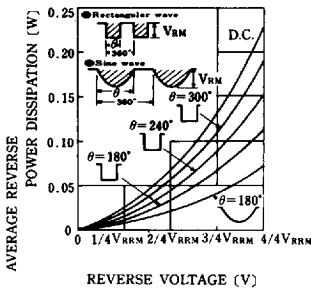


FIG.5-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

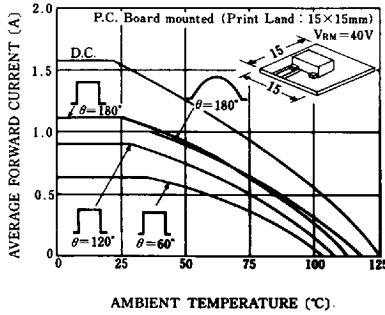


FIG.6-SURGE CURRENT RATINGS

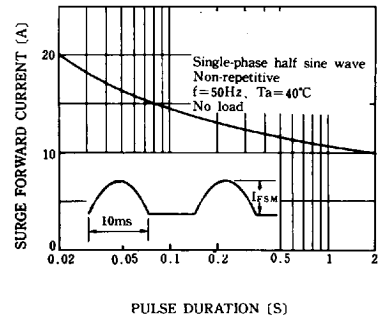


FIG.7-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

