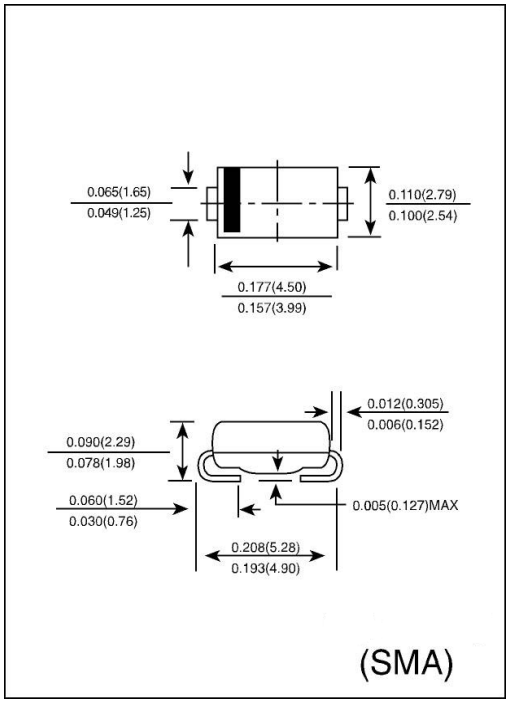
永裕泰 YONGYUTAI

## FEATURES

- Glass passivated chip junction
- Ideal for surface mounted applications
- Low leakage
- High forward surge current capability.
- High temperature soldering guaranteed: 260℃/10 seconds at terminals.




## MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V - 0 rate flame retardant.
- Polarity: Color band denotes cathode end
- Lead: Plated terminals solderable per MIL - STD - 202E method 208C
- Weight: 0.002 ounce, 0.057 gram

## 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%

| CatalogNumber | | SYMBOLS | M7 | UNITS |
|---|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | | $V_{RRM}$ | 1000 | Volts |
| Maximum RMS Voltage | | $V_{RMS}$ | 700 | Volts |
| Maximum DC Blocking Voltage | | $V_{DC}$ | 1000 | Volts |
| Maximum Average Forward Rectified Current, at $T_A$ = 75℃ | | $I_{(AV)}$ | 1.0 | Amp |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | | $I_{FSM}$ | 30 | Amps |
| Maximum Instantaneous Forward Voltage Drop at 1.0A | | $V_F$ | 1.1 | Volts |
| Maximum DC Reverse Current at rated DC blocking voltage | $T_C$ = 25℃ | $I_R$ | 5.0 | μA |
| | $T_A$ = 125℃ | | 50 | |
| Maximum Full Load Reverse Current, full cycle average at $T_A$ = 75℃ | | $I_{R(AV)}$ | 30 | μA |
| Typical Junction Capacitance (Note 1) | | $C_J$ | 15 | pF |
| Typical Thermal Resistane (Note 2) | | $R_{\theta JA}$ | 75 | ℃/w |
| Operating and Storage Temperature Range | | $T_J$,$T_{STG}$ | (-65 to +175) | ℃ |

**NOTES:**

1. Measured at 1.0 MHz and applied aberage voltage of 4.0 volts.
2. 6.0 X 6.0mm$^2$ copper pads to each terminal.

FIG.1-TYPICAL FORWARD CURRENT
DERATING CURVE

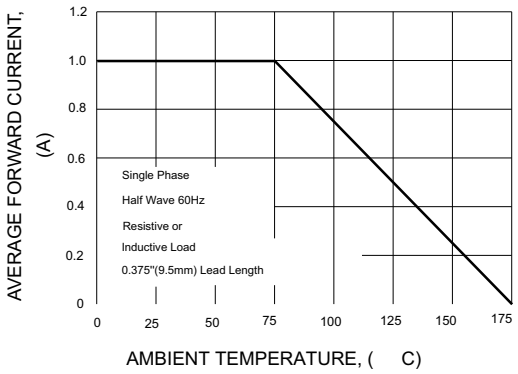



FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

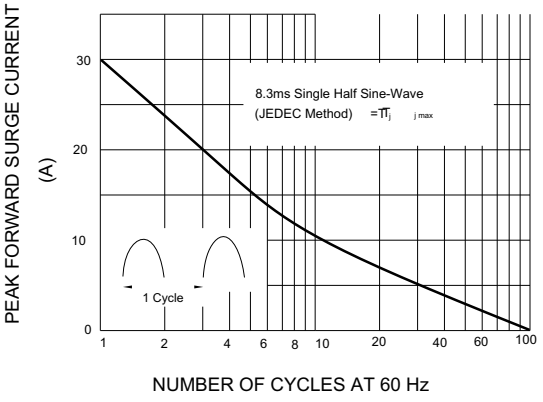



FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

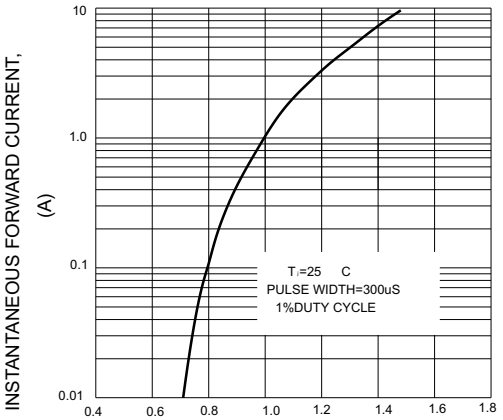



FIG.4-TYPICAL REVERSE
CHARACTERISTICS

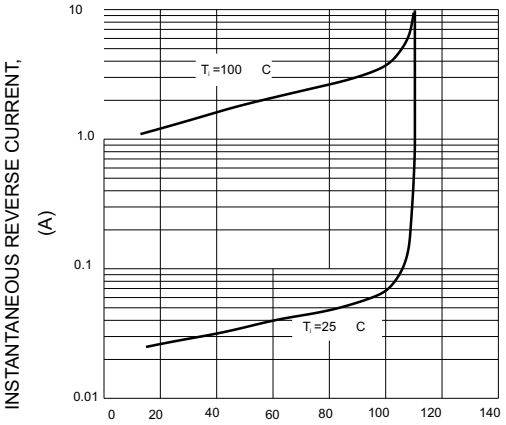



FIG.5-TYPICAL JUNCTION CAPACITANCE