



WEET Technology Company Limited

General Purpose Rectifiers

M1 THRU M7

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

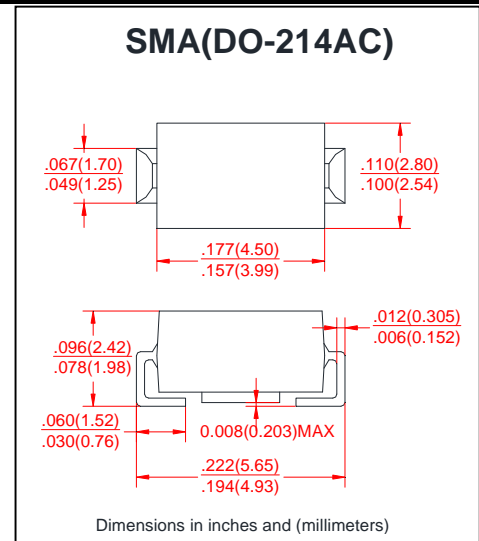
1.0 Ampere

FEATURES

- Low forward voltage drop
- Low leakage current
- High forward surge capability

MECHANICAL DATA

- Case: SMA mold plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Indicated by cathode band
- Lead: Solder plated, solderable per MIL-STD-750 method 2026
- Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

| | SYMBOLS | M1 | M2 | M3 | M4 | M5 | M6 | M7 | UNITS |
|--|---------------------------|-------------|-----|-----|-----|-----|-----|------|---------------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Current at $T_A=75^\circ\text{C}$ | $I_{(AV)}$ | 1.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 30 | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage at 1.0A | V_F | 1.0 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $T_A = 25^\circ\text{C}$ | 2.5 | | | | | | | μA |
| | $T_A = 125^\circ\text{C}$ | 50 | | | | | | | |
| Typical Junction Capacitance (NOTE 1) | C_J | 12 | | | | | | | pF |
| Typical Thermal Resistance (NOTE 2) | $R_{\theta JA}$ | 55 | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Thermal Resistance from Junction to Ambient at $8.0 \times 8.0\text{mm}^2$ copper pad areas.



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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

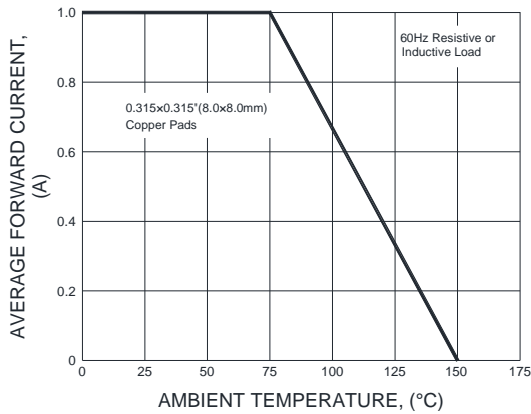


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

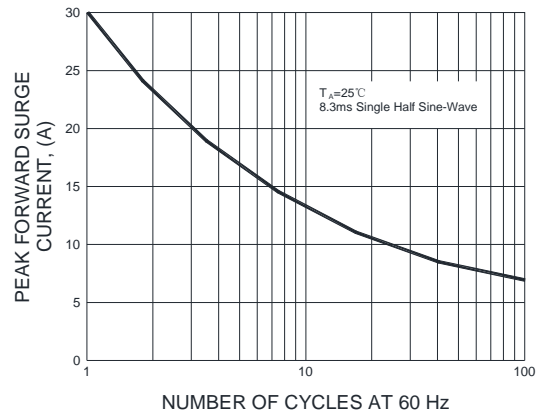


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

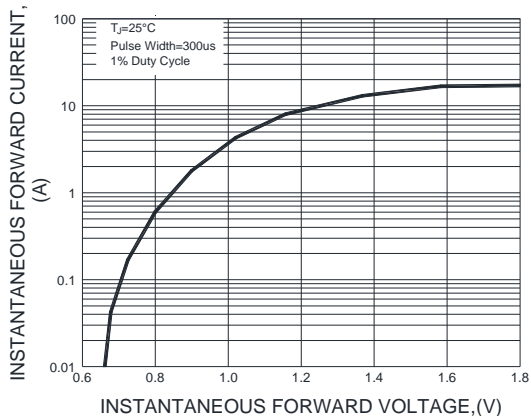


FIG.4-TYPICAL REVERSE CHARACTERISTICS

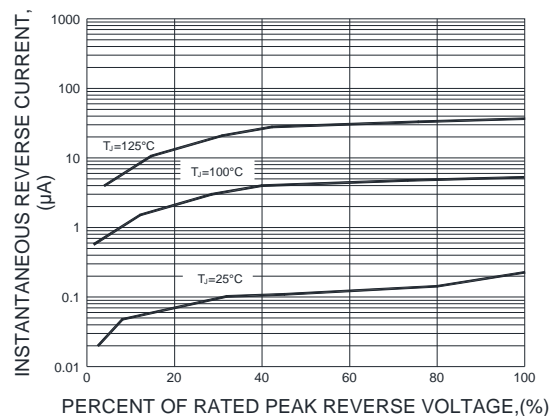
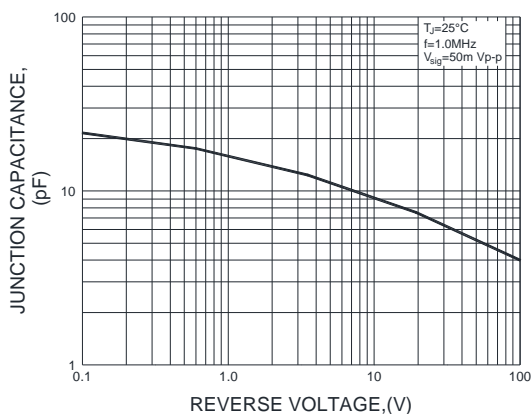


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.