

1JU42

PRV : 600 Volts
Io : 1.0 Ampere

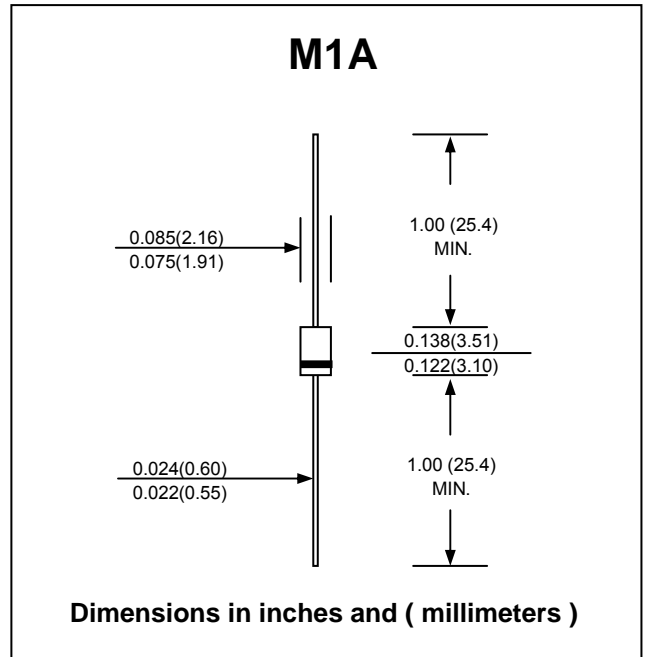
FEATURES :

- * Glass passivated junction chip
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : M1A Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.20 gram (approximately)

HIGH EFFICIENT RECTIFIER



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

| RATING | SYMBOL | VALUE | UNIT |
|---|-------------|---------------|------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 600 | V |
| Maximum Average Forward Current, $T_a = 25\text{ }^\circ\text{C}$ | $I_{F(AV)}$ | 1.0 | A |
| Maximum Peak One Cycle Surge Forward Current (Non-Repetitive) | I_{FSM} | 15 (50Hz) | A |
| | | 17 (60Hz) | |
| Maximum Peak Forward Voltage at $I_F = 1.0\text{ A}$ | V_F | 2.0 | V |
| Maximum Repetitive Peak Reverse Current at $V_{RRM} = 600\text{ V}$ | I_R | 100 | μA |
| Maximum Reverse Recovery Time (Note 1) | T_{rr} | 100 | ns |
| Junction Temperature Range | T_J | - 40 to + 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | - 40 to + 150 | $^\circ\text{C}$ |

Note:

(1) Reverse Recovery Test Conditions : $I_F = 1\text{ A}$, $di/dt = -30\text{ A}/\mu\text{s}$.

RATING AND CHARACTERISTIC CURVES (1JU42)

FIG.1 - DERATING CURRENT CURVE

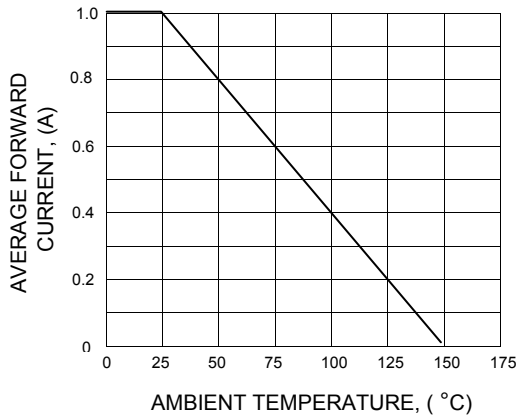


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

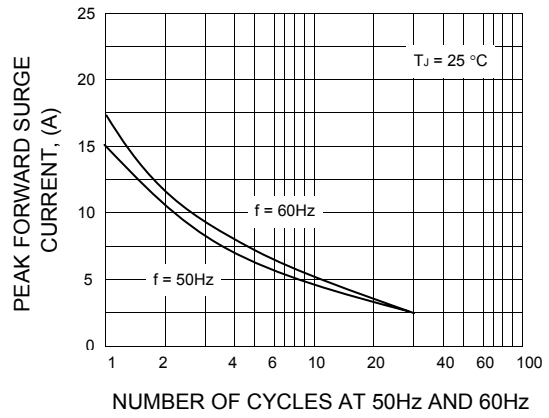


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

