

1JU42

HIGH EFFICIENT RECTIFIER

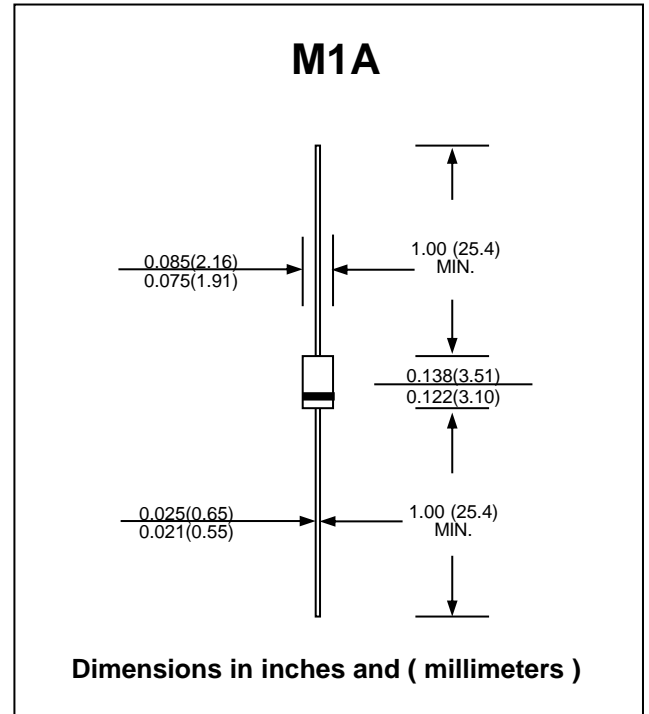
PRV : 600 Volts
Io : 1.0 Ampere

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)



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, $T_a = 25\text{ °C}$	$I_{F(AV)}$	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

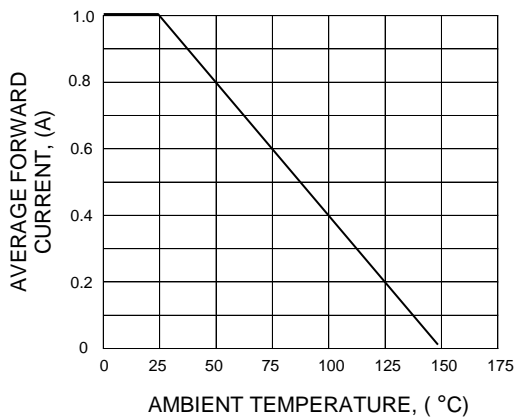


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

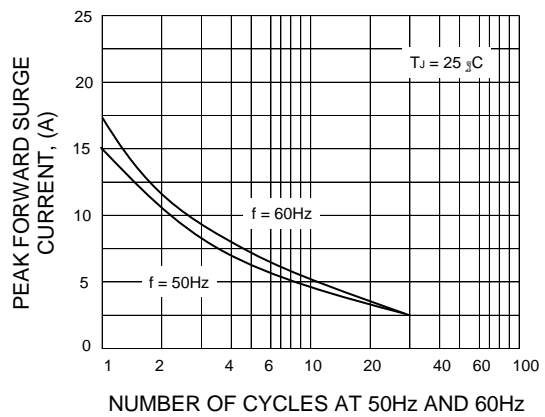


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

