

MRA4003 - MRA4007

SURFACE MOUNT RECTIFIERS

PRV : 300 - 1000 Volts

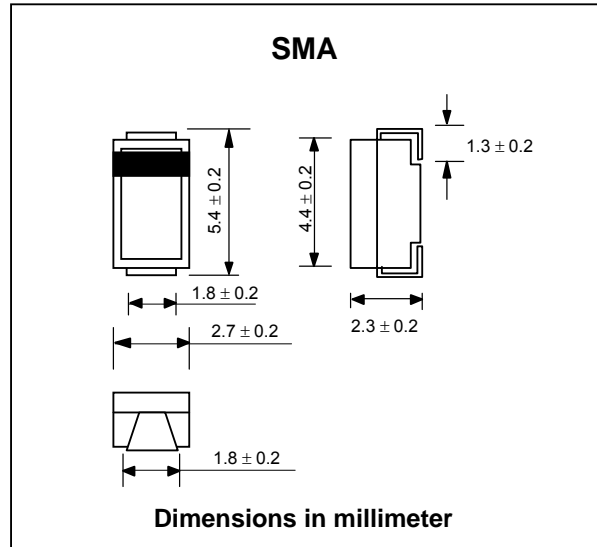
I_o : 1.0 Ampere

FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.060 gram (Approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	MAR4003	MAR4004	MAR4005	MAR4006	MAR4007	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	300	400	600	800	1000	V
Maximum Working Peak Reverse Voltage	V _{RWM}	300	400	600	800	1000	V
Maximum DC Blocking Voltage	V _{DC}	300	400	600	800	1000	V
Maximum Average Forward Current (at Rated V _R , T _L = 150 °C)	I _{F(AV)}	1.0					A
Maximum Non-Repetitive Peak Surge Current (Surge applied at rated load condition, Halfwave , single phase, 60Hz)	I _{FSM}	30					A
Maximum Instantaneous Forward Voltage at I _F = 1.0 A., T _J = 25 °C	V _F	1.10					V
at I _F = 2.0 A., T _J = 25 °C		1.18					
Maximum Instantaneous Reverse Current (at rated DC Voltage) T _J = 25 °C	I _{RM}	10					µA
Junction Temperature Range	T _J	- 55 to + 175					°C
Storage Temperature Range	T _{STG}	- 55 to + 150					°C

Note : (1) Pulse Test: Pulse Width ≤ 250 µs, Duty Cycle ≤ 2%.

RATING AND CHARACTERISTIC CURVES (MRA4003 - MRA4007)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

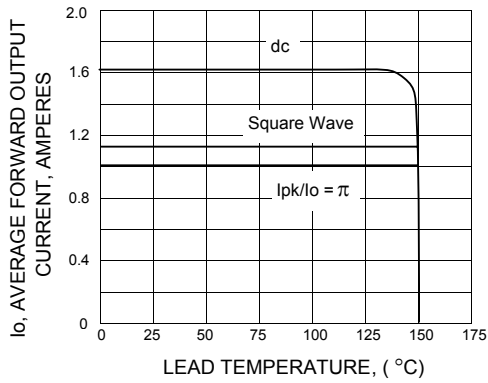


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

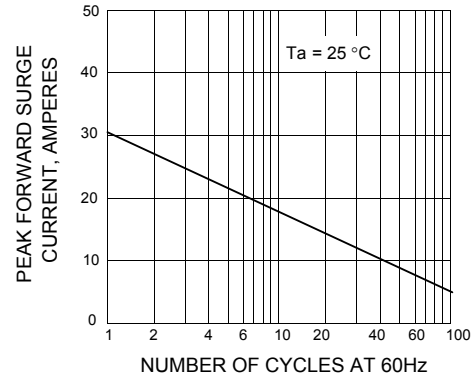


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

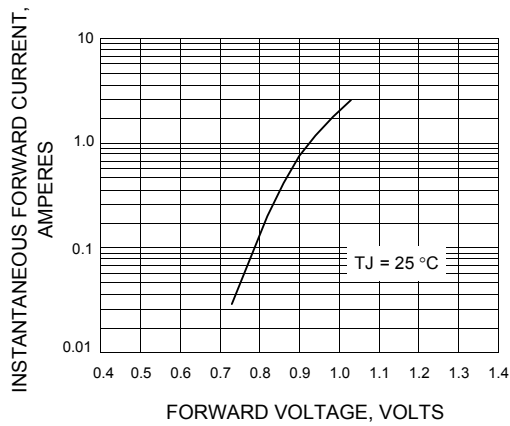


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

