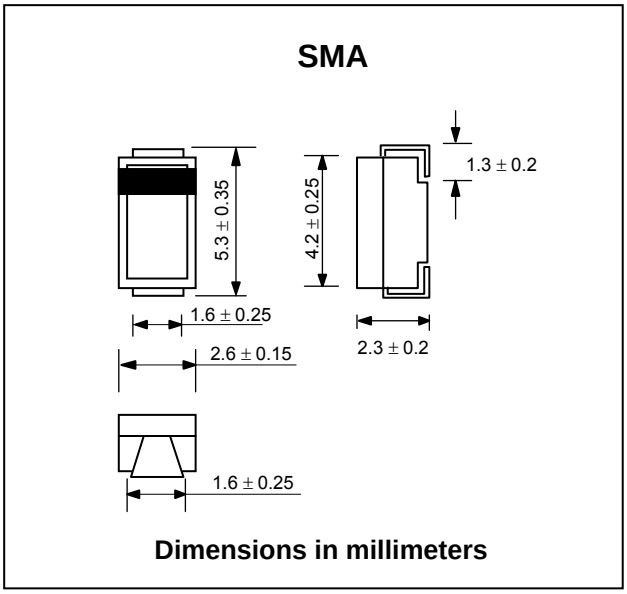
MRA4003 - MRA400

SURFACE MOUNT RECTIFIERS

PRV : 300 - 1000 Volts
Io : 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 specifie. 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 raed 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

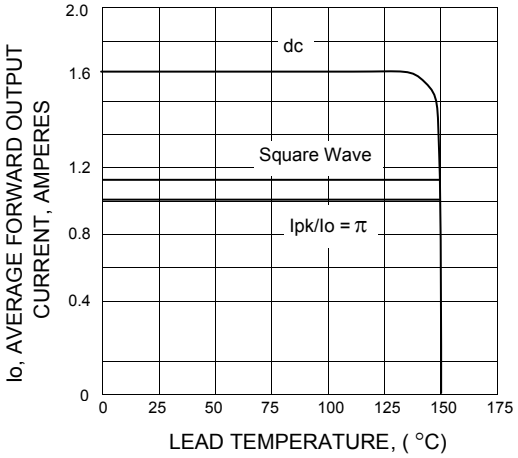


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

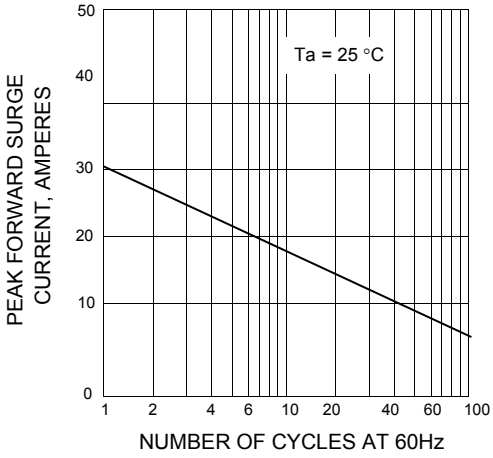


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

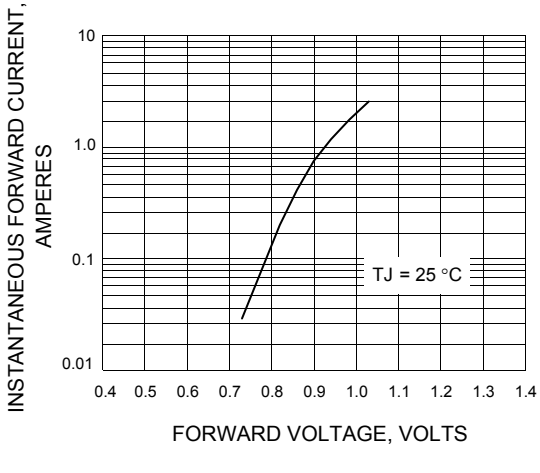


FIG.4 - TYPICAL REVERSE CHARACTERISTICS