

S1T

SURFACE MOUNT HIGH VOLTAGE RECTIFIER

PRV : 3000 Volts

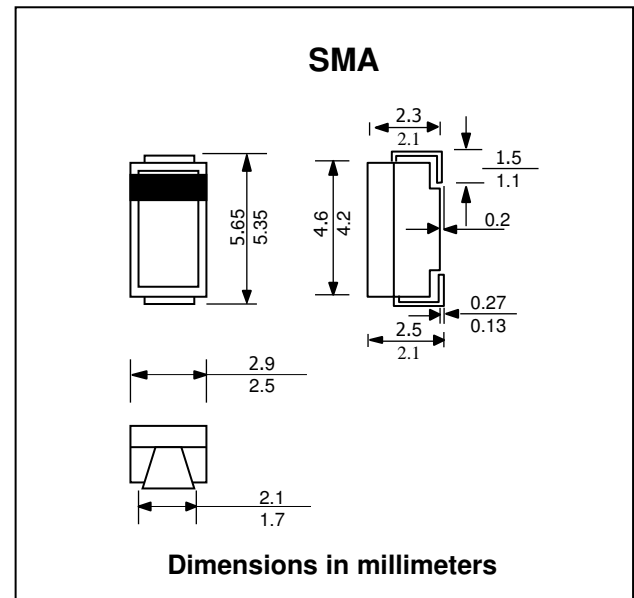
Io : 1.0 Ampere

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 specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	3000	V
Maximum RMS Voltage	V_{RMS}	2100	V
Maximum DC Blocking Voltage	V_{DC}	3000	V
Maximum Average Forward Current $T_a = 75\text{ }^\circ\text{C}$	I_F	1.0	A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	30	A
Maximum Instantaneous Forward Voltage at $I_F = 1.0\text{ A}$.	V_F	3.0	V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$	I_R	5.0	μA
at rated DC Blocking Voltage $T_a = 125\text{ }^\circ\text{C}$	$I_{R(H)}$	50	μA
Operating Junction Temperature Range	T_J	- 55 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 150	$^\circ\text{C}$

RATING AND CHARACTERISTIC CURVES (S1T)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

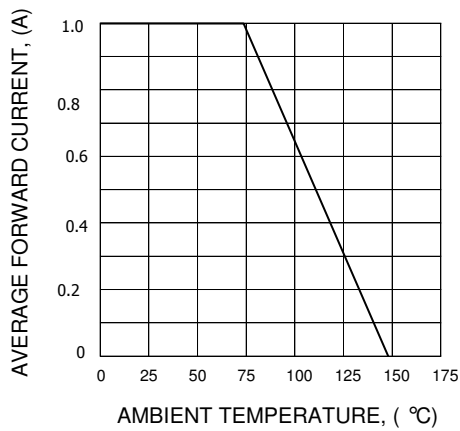


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

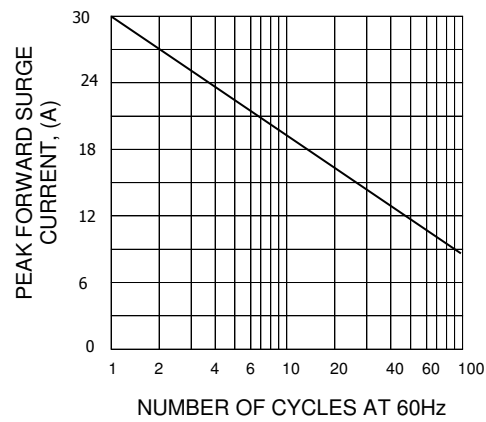


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

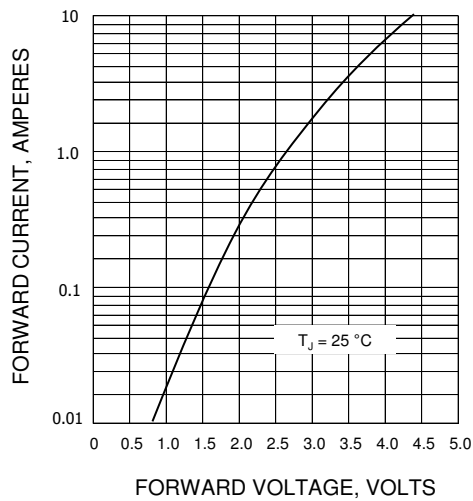


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

