

SR1N - SR1P

PRV : 1200 ~ 1600 Volts

Io : 1.0 Ampere

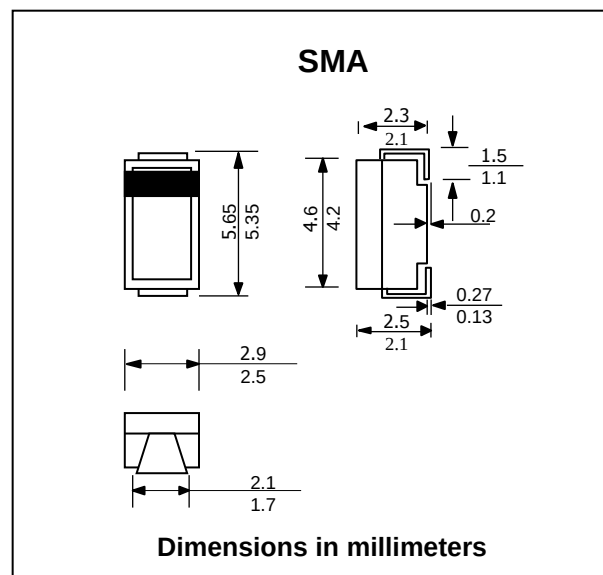
FEATURES :

- * Glass passivated junction chip
- * High surge current capability
- * High reliability
- * Low reverse current
- * Fast recovery time
- * **Pb Free / RoHS Compliant**

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)

SURFACE MOUNT FAST RECOVERY RECTIFIER



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	SR1N	SR1O	SR1P	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1200	1400	1600	V
Maximum RMS Voltage	V_{RMS}	840	980	1120	V
Maximum DC Blocking Voltage	V_{DC}	1200	1400	1600	V
Maximum Average Forward Current $T_a = 75^\circ\text{C}$ at 8.3 ms Single Half sine-wave	$I_{F(AV)}$	1.0			A
Maximum Non-Repetitive Peak Forward Surge Current	I_{FSM}	30			A
Maximum Peak Forward Voltage at $I_F = 1.0\text{ A}$	V_F	2.6			V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$	I_R	5.0			μA
at Rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	$I_{R(H)}$	50			μA
Reverse Recovery Time (Note 1)	T_{rr}	300			ns
Operating 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 : $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$.

RATING AND CHARACTERISTIC CURVES (SR1N - SR1P)

FIG. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

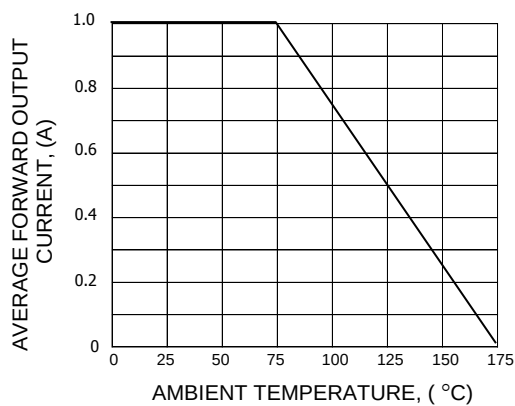


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

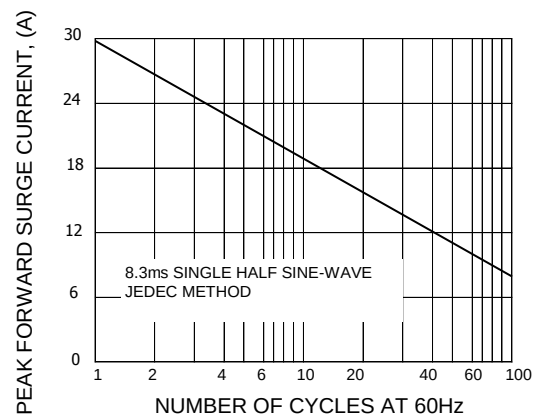


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS

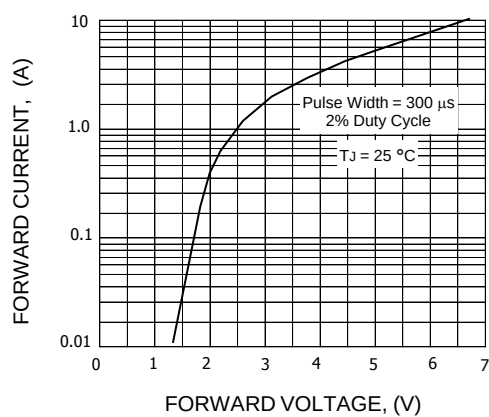


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

