

SE1N

HIGH VOLTAGE ULTRAFAST RECTIFIER DIODE

PRV : 1200 Volts

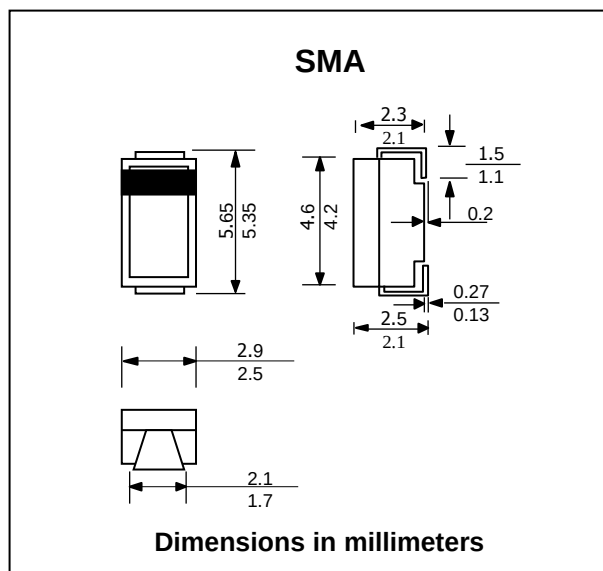
Io : 1.0 Ampere

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-0 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.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1200	V
Maximum RMS Voltage	V_{RMS}	840	V
Maximum DC Blocking Voltage	V_{DC}	1200	V
Maximum Average Forward Current $T_a = 75^{\circ}C$ 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 $I_F = 1.0$ A	V_F	2.2	V
Maximum DC Reverse Current $T_j = 25^{\circ}C$ at Rated DC Blocking Voltage $T_j = 100^{\circ}C$	I_R	5.0	μA
	$I_{R(H)}$	50	μA
Reverse Recovery Time (Note 1)	T_{rr}	75	ns
Operating Junction Temperature Range	T_j	- 40 to + 150	$^{\circ}C$
Storage Temperature Range	T_{STG}	- 40 to + 150	$^{\circ}C$

Note :

(1) Reverse Recovery Test Conditions : $I_F = 0.5$ A, $I_R = 1.0$ A, $I_{rr} = 0.25$ A.

RATING AND CHARACTERISTIC CURVES (SE1N)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

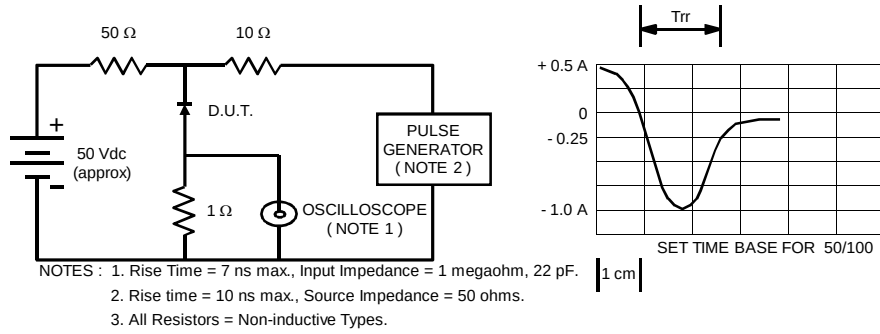


FIG. 2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

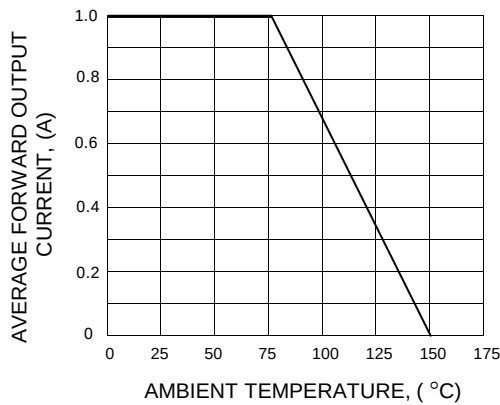


FIG. 3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

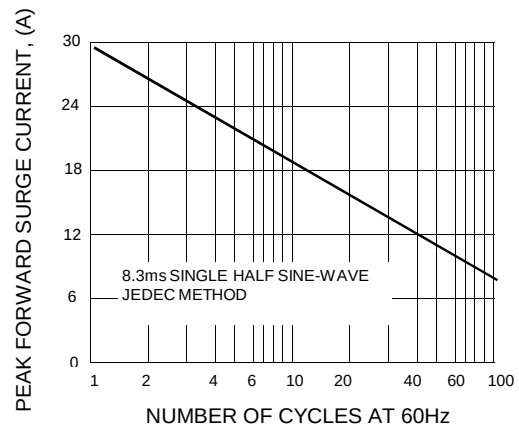


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

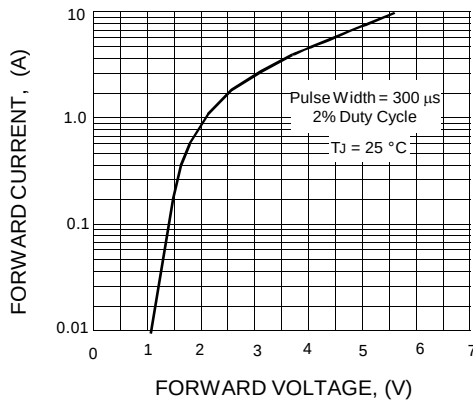


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

