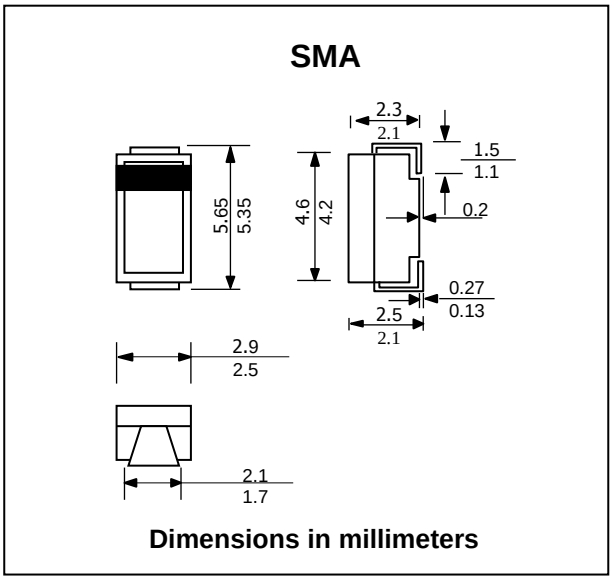
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SR1R

FAST RECOVERY RECTIFIER DIODE

PRV : 2000 Volts
Io : 0.5 Ampere



FEATURES :

* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Fast switching for high efficiency
* 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}	2000	V
Maximum RMS Voltage	V_{RMS}	1400	V
Maximum DC Blocking Voltage	V_{DC}	2000	V
Maximum Average Forward Current Ta = 75 °C	$I_{F(AV)}$	0.5	A
Maximum Peak Forward Surge Current	I_{FSM}	30	A
Maximum Peak Forward Voltage at 0.5 A	V_F	3.0	V
Maximum DC Reverse Current Ta = 25 °C	I_R	5.0	µA
at Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	50	µA
Reverse Recovery Time (Note 1)	Trr	200	ns
Junction Capacitance (Note 2)	C_J	5.0	pF
Junction Temperature Range	T_J	- 40 to + 150	°C
Storage Temperature Range	T_{STG}	- 40 to + 150	°C

Notes :

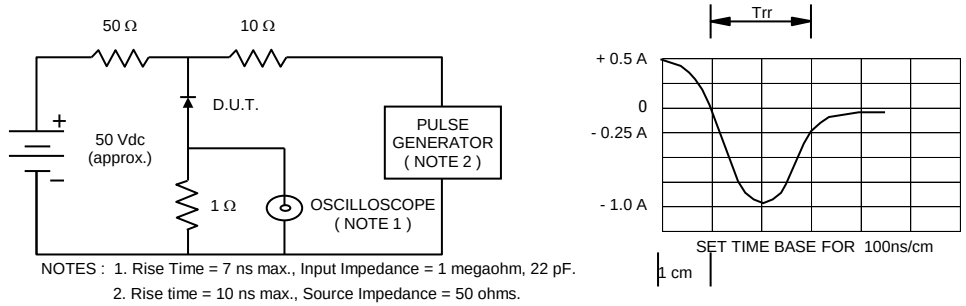
(1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, Irr = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}

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RATING AND CHARACTERISTIC CURVES (SR1R)

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



NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
2. Rise time = 10 ns max., Source Impedance = 50 ohms.
3. All Resistors = Non-inductive Types.

FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

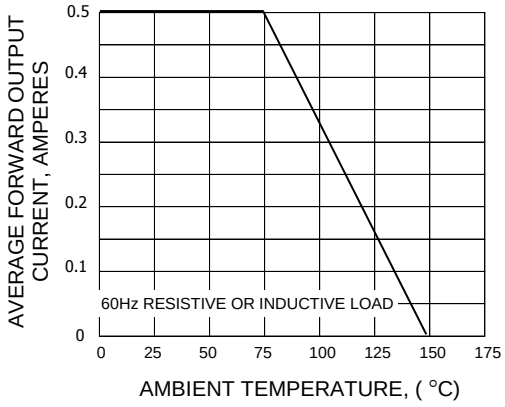


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

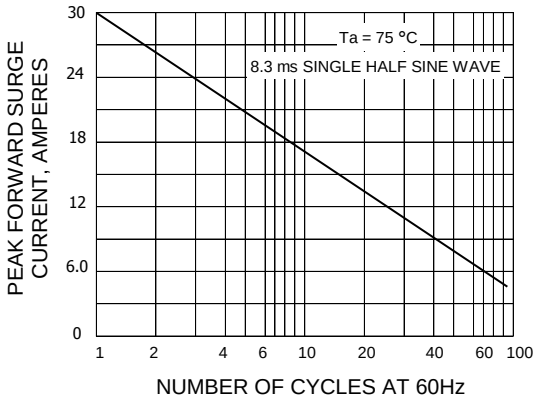


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

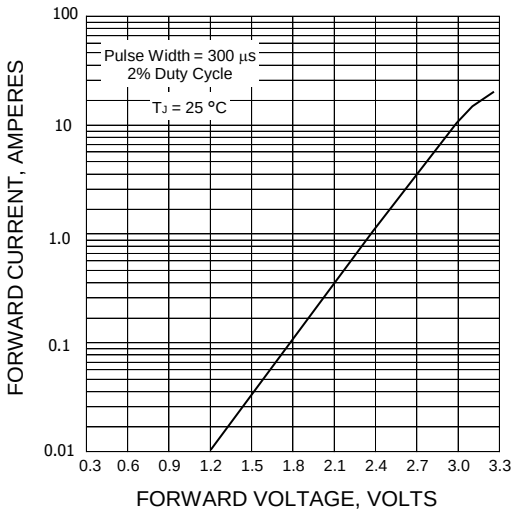
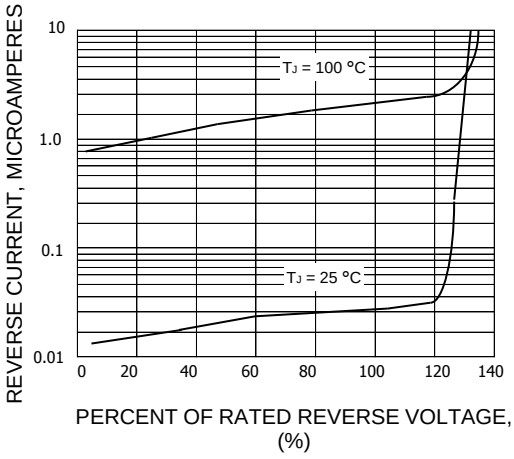


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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