

SR1R

FAST RECOVERY RECTIFIER DIODE

PRV : 2000 Volts

Io : 0.5 Ampere

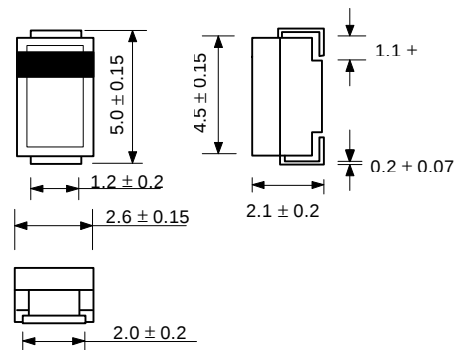
FEATURES :

- * High current capability
- * 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
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.064 gram

SMA (DO-214AC)



Dimensions in millimeter

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)	T _{rr}	100	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, I_{rr} = 0.25 A.

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

RATING AND CHARACTERISTIC CURVES (SR1R)

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

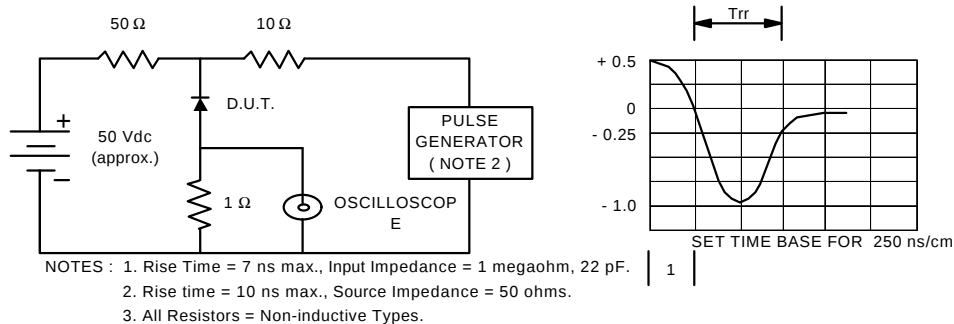


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

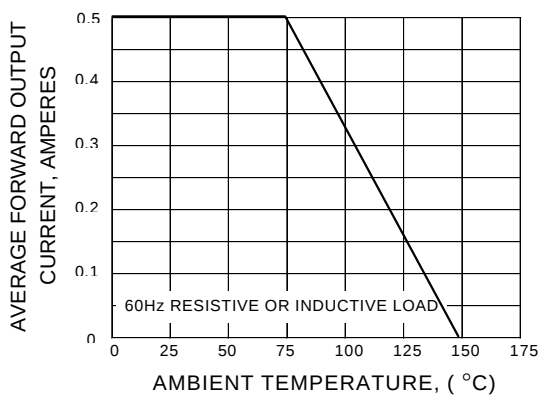


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

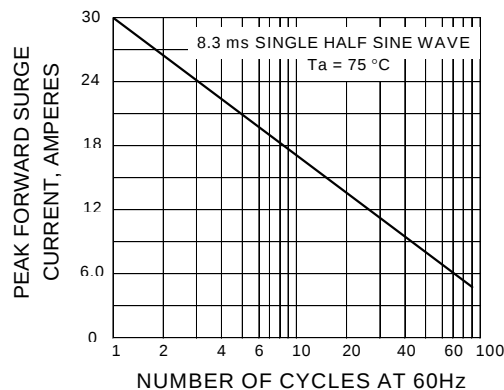


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

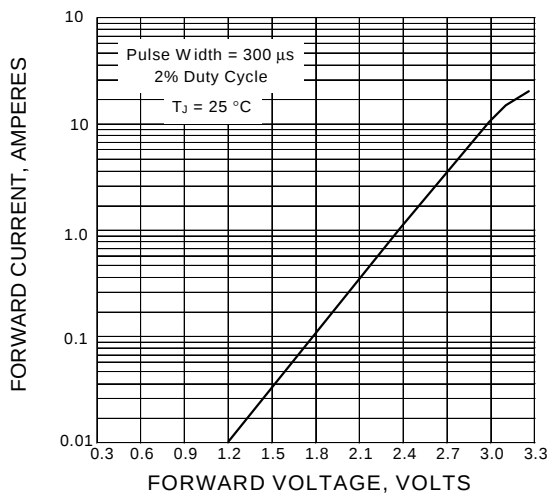


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

