



Certificate Number: Q10561

Certificate Number: S17276

SN1N - SN1R

PRV : 1200 - 2000 Volts

Io : 1.0 Ampere

FEATURES :

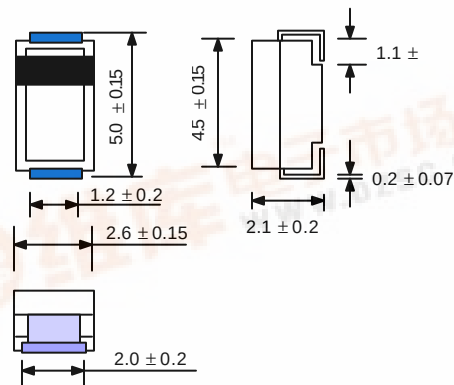
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.06 gram

SURFACE MOUNT HIGH VOLTAGE RECTIFIERS

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	SN1N	SN1O	SN1P	SN1Q	SN1R	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1200	1400	1600	1800	2000	Volts
Maximum RMS Voltage	V_{RMS}	840	980	1120	1260	1400	Volts
Maximum DC Blocking Voltage	V_{DC}	1200	1400	1600	1800	2000	Volts
Maximum Average Forward Current $T_a = 75^\circ\text{C}$	$I_F(AV)$	1.0					Amp.
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	30					Amps.
Maximum Peak Forward Voltage at $I_F = 1.0$ Amp.	V_F	2.2					Volts
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	I_R	5.0					μA
	$I_{R(H)}$	100					μA
Typical Junction Capacitance (Note 1)	C_j	36					pF
Junction Temperature Range	T_J	- 40 to + 150					$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 40 to + 150					$^\circ\text{C}$

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

RATING AND CHARACTERISTIC CURVES (SN1N - SN1R)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

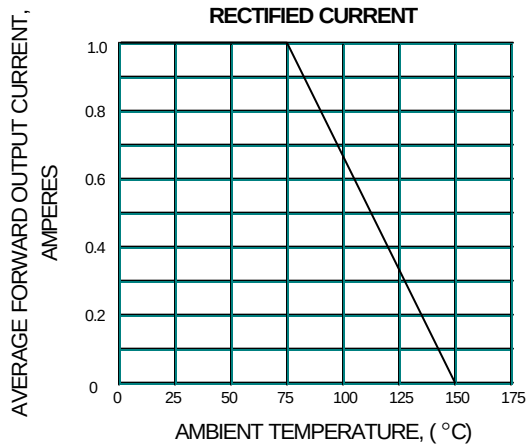


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

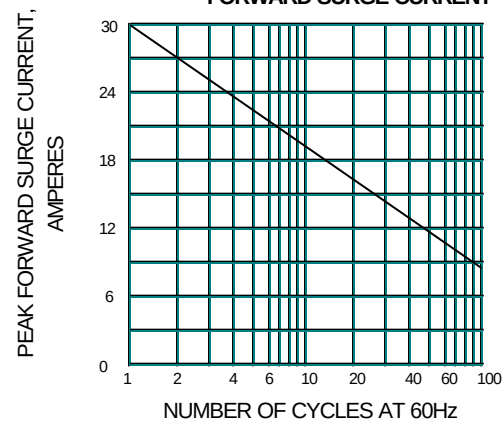


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

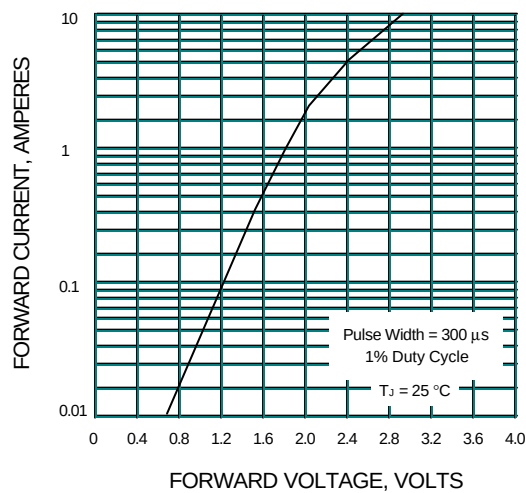


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

