

SN5N - SN5R

PRV : 1200 - 2000 Volts

Io : 5.0 Amperes

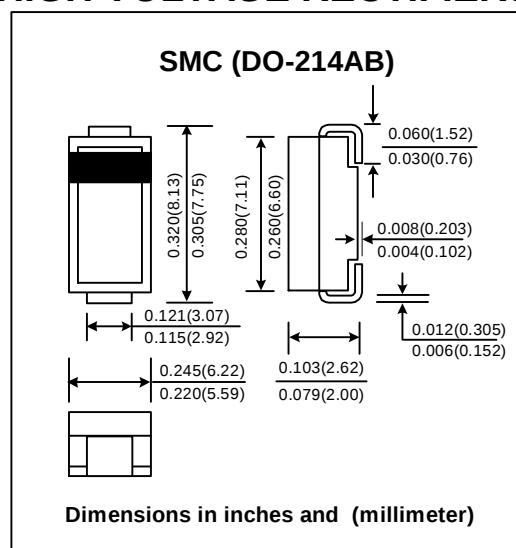
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : SMC Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.21 gram

SURFACE MOUNT HIGH VOLTAGE RECTIFIERS



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	SN5N	SN5O	SN5P	SN5Q	SN5R	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	1200	1400	1600	1800	2000	V
Maximum RMS Voltage	V _{RMS}	840	980	1120	1260	1400	V
Maximum DC Blocking Voltage	V _{DC}	1200	1400	1600	1800	2000	V
Maximum Average Forward Current Ta = 50°C	I _{F(AV)}	5.0					A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	200					A
Maximum Peak Forward Voltage at I _F = 5.0 A	V _F	2.2					V
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 100°C	I _R	10					μA
	I _{R(H)}	100					μA
Typical Junction Capacitance (Note 1)	C _j	36					pF
Junction Temperature Range	T _J	- 40 to + 150					°C
Storage Temperature Range	T _{STG}	- 40 to + 150					°C

Notes :

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

RATING AND CHARACTERISTIC CURVES (SN5N - SN5R)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

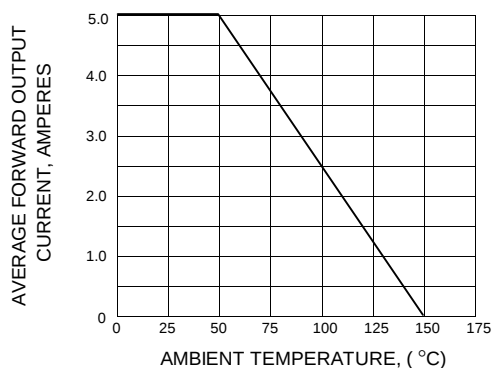


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

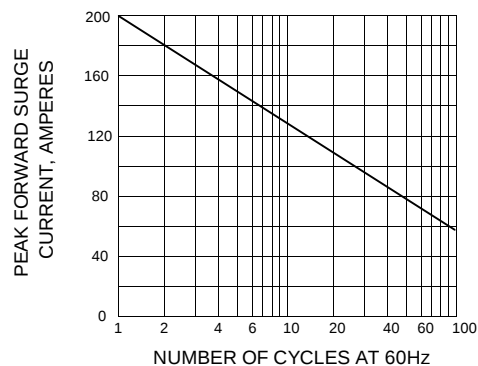


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

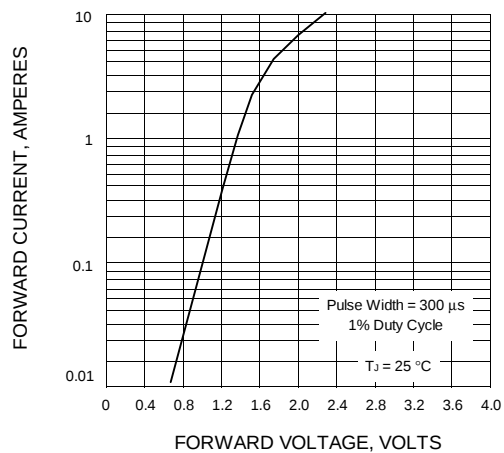


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

