

SN5A - SN5M

SURFACE MOUNT RECTIFIERS

PRV : 50 - 1000 Volts

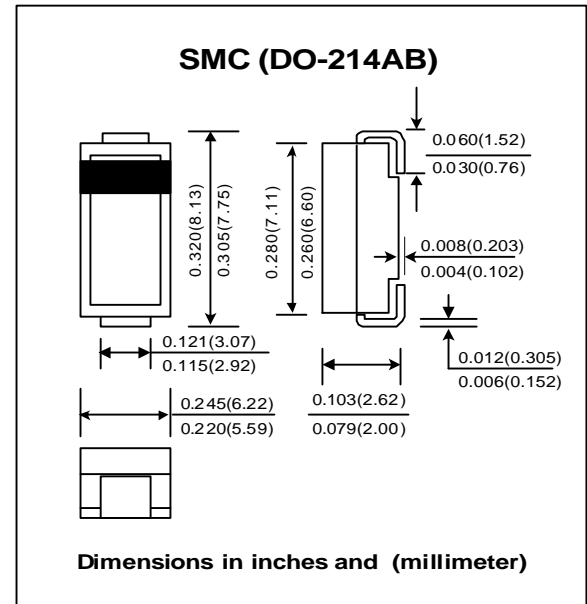
Io : 5.0 Amperes

FEATURES :

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

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



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	SN5A	SN5B	SN5D	SN5G	SN5J	SN5K	SN5M	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current $T_a = 60^\circ\text{C}$	I_F	5.0							A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	300							A
Maximum Forward Voltage at $I_F = 5.0$ Amps.	V_F	0.95							V
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$	I_R	20							μA
at rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	$I_{R(H)}$	50							μA
Typical Junction Capacitance (Note1)	C_J	50							pF
Junction Temperature Range	T_J	- 65 to + 175							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 175							$^\circ\text{C}$

Notes :

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

RATING AND CHARACTERISTIC CURVES (SN5A - SN5M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

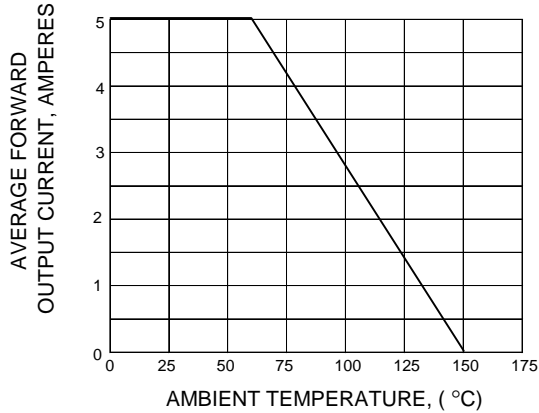


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

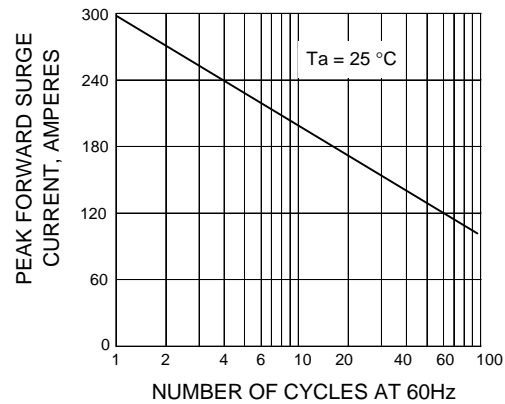


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

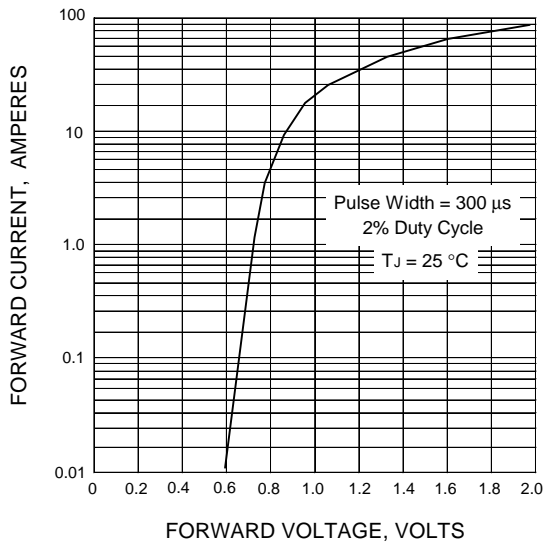


FIG.4 - TYPICAL JUNCTION CAPACITANCE

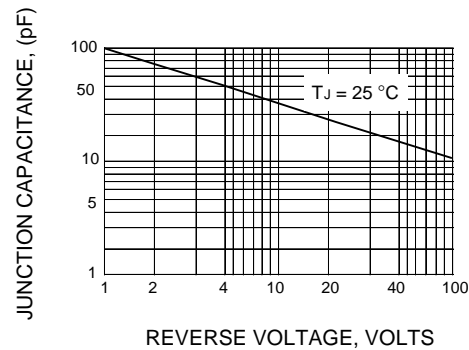


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

