

S3A - S3M

PRV : 50 - 1000 Volts
Io : 3.0 Amperes

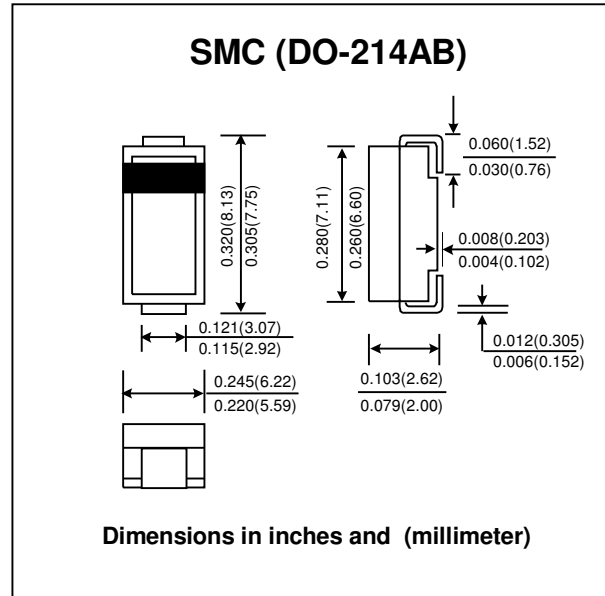
FEATURES :

- * 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 : 0.26 gram

SURFACE MOUNT 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	S3A	S3B	S3D	S3G	S3J	S3K	S3M	UNITS	
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 Ta = 75 °C	I _F	3.0								A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	200								A
Maximum Forward Voltage at I _F = 3.0 Amps.	V _F	1.0								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
Typical Junction Capacitance (Note1)	C _J	50								pF
Junction Temperature Range	T _J	- 65 to + 150								°C
Storage Temperature Range	T _{STG}	- 65 to + 150								°C

Note :

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

RATING AND CHARACTERISTIC CURVES (S3A - S3M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

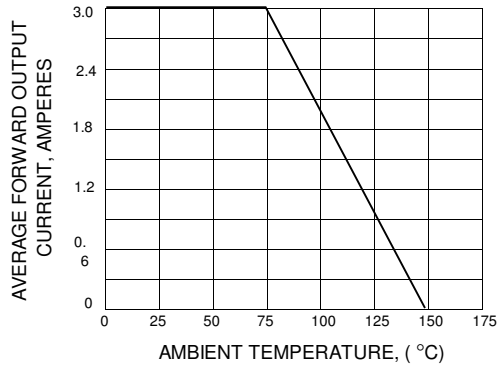


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

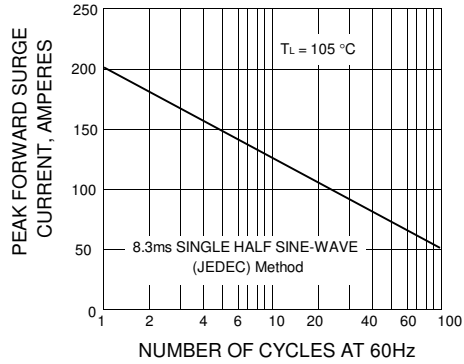


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

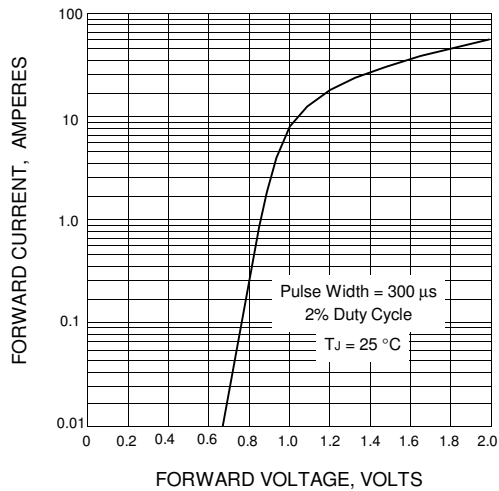


FIG.4 - TYPICAL JUNCTION CAPACITANCE

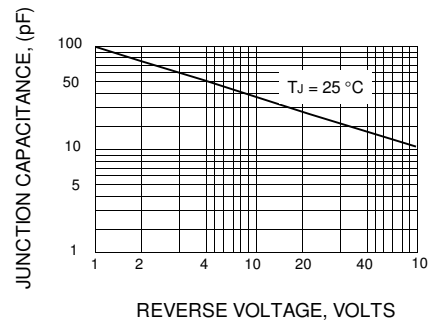


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

