

Pb Free Plating Product

S6A thru S6M



6.0 Ampere Surface Mount Glass Passivated General Purpose Rectifier

Features

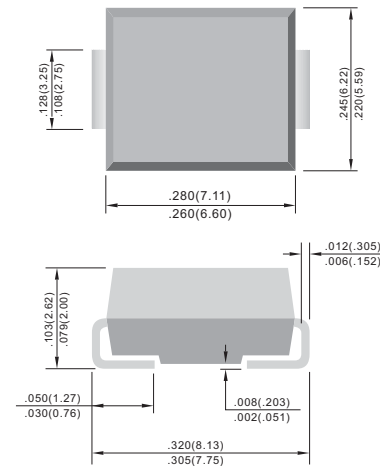
- ★ Low forward voltage drop
- ★ High current capability
- ★ Low reverse leakage current
- ★ High surge current capability
- ★ Glass passivated chip junction

Mechanical Data

- ★ Case: Molded plastic SMC/DO-214AB
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-750 method 2026
- ★ Polarity: Color band denotes cathode end
- ★ Mounting position: Any
- ★ Weight: 0.21 gram approximately

SMC/DO-214AB

Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SYMBOL	S6A	S6B	S6D	S6G	S6J	S6K	S6M	UNIT
Maximum Recurrent 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 Rectified Current T _A =75°C	I _(AV)	6.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150							A
Maximum Instantaneous Forward Voltage @ 6.0 A	V _F	1.1							V
Maximum DC Reverse Current @T _J =25°C At Rated DC Blocking Voltage @T _J =125°C	I _R	10.0 250							uA uA
Typical junction Capacitance (Note 1)	C _J	50							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	20							°C/W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-65 to +150							°C

NOTES : (1) Thermal Resistance junction to ambient.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

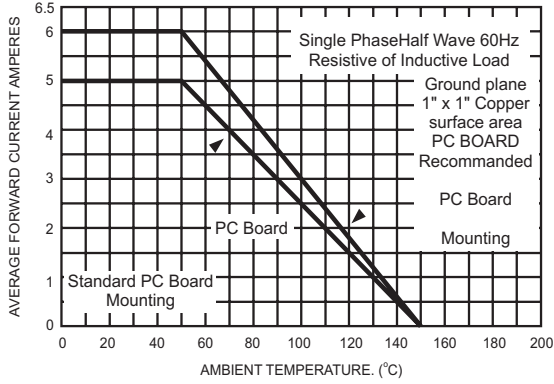


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

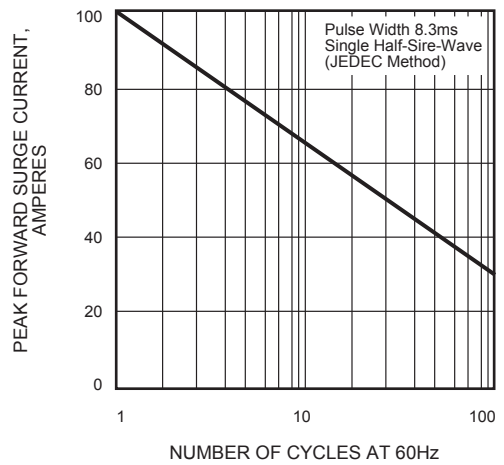


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

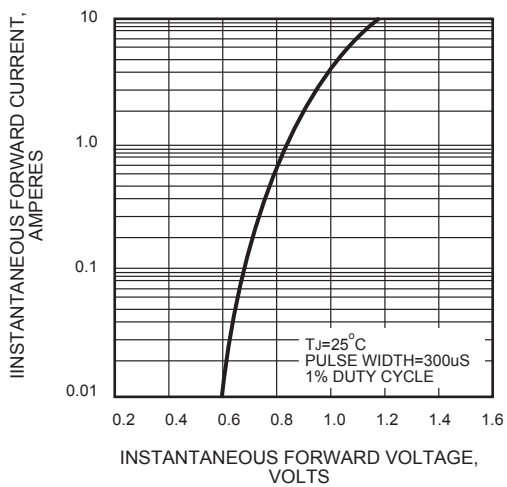


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

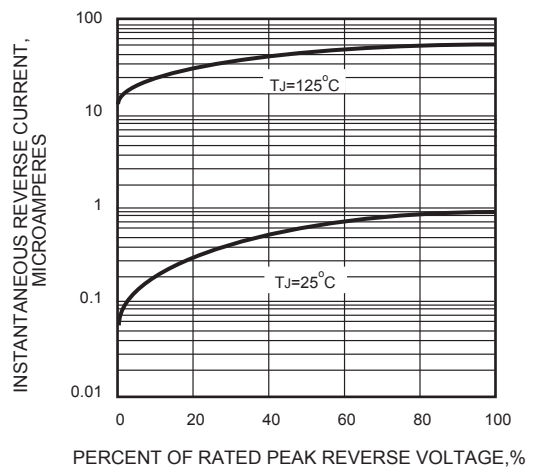


FIG.5 - TYPICAL JUNCTION CAPACITANCE

