

Voltage Range 50 to 1000 V

Current 3.0 Ampere

Features

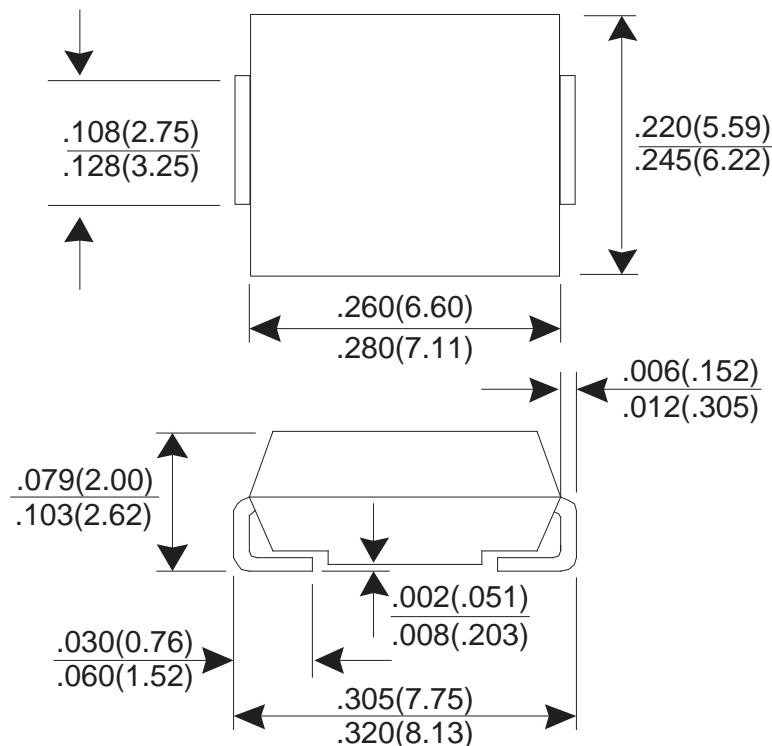
- * Low forward voltage drop
- * High current capability
- * Low reverse leakage current
- * High surge current capability
- * Glass passivated chip

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

Dimensions in inches and (millimeters)

SMC/DO-214AB



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%.

PARAMTER	SYMBOL	TS3A	TS3B	TS3D	TS3G	TS3J	TS3K	TS3M	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 =103°C	I _(AV)	3.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100							A
Maximum Instantaneous Forward Voltage @ 3.0 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	5.0 150							uA uA
Typical junction Capacitance (Note 1)	C _J	60							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	47							°C/W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 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.

RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

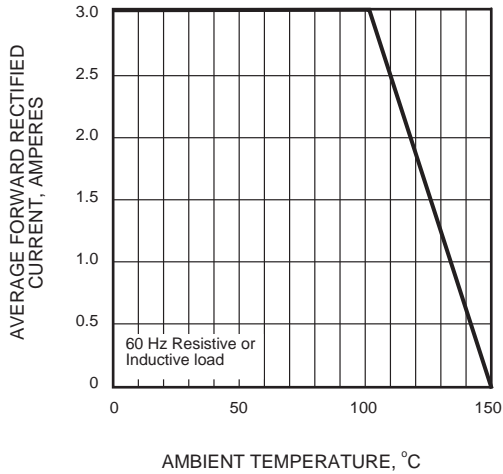


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

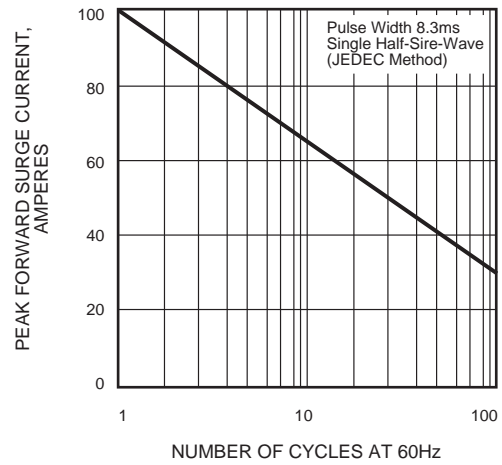


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

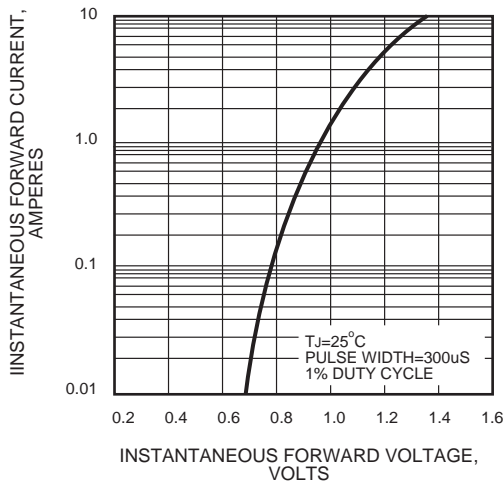


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

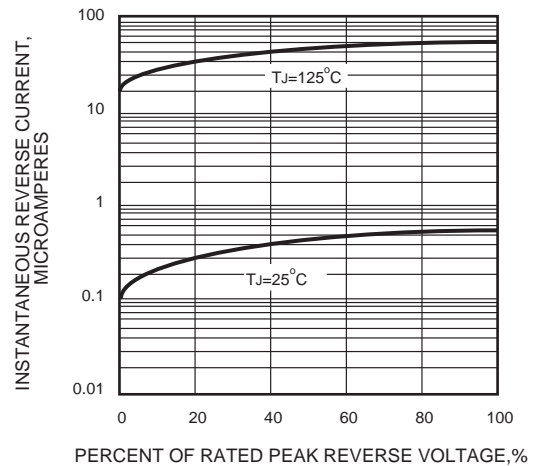


FIG.5 - TYPICAL JUNCTION CAPACITANCE

