

Voltage Range 50 to 1000 V

Current 5.0 Ampere

Features

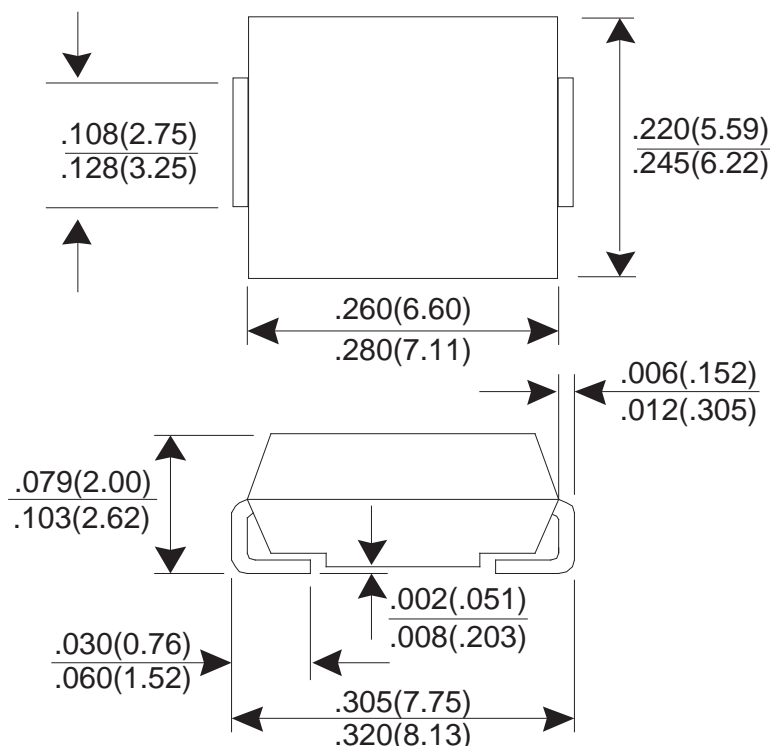
- * Low forward voltage drop
- * High current capability
- * Low reverse leakage current
- * High surge current capability
- * Glass passivated chip

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	TS5A	TS5B	TS5D	TS5G	TS5J	TS5K	TS5M	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current TA=75°C	I(AV)	5.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	100							A
Maximum Instantaneous Forward Voltage @ 5.0 A	VF	1.15							V
Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C	IR	10.0 250							uA uA
Typical junction Capacitance (Note 1)	CJ	40							pF
Typical Thermal Resistance (Note 2)	RθJA	10							°C/W
Operating Junction and Storage Temperature Range	TJ,TSTG	-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

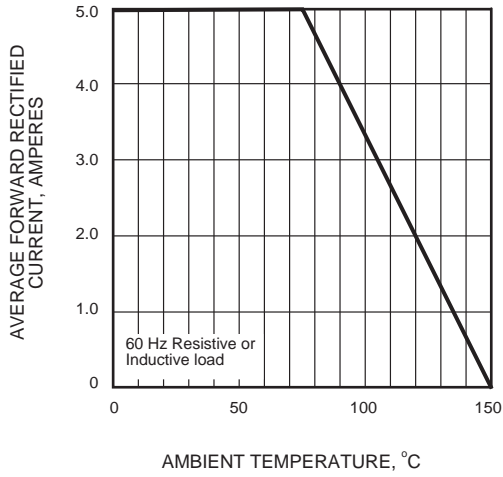


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

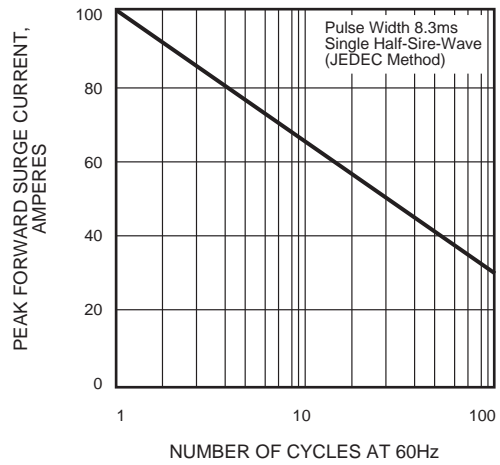


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

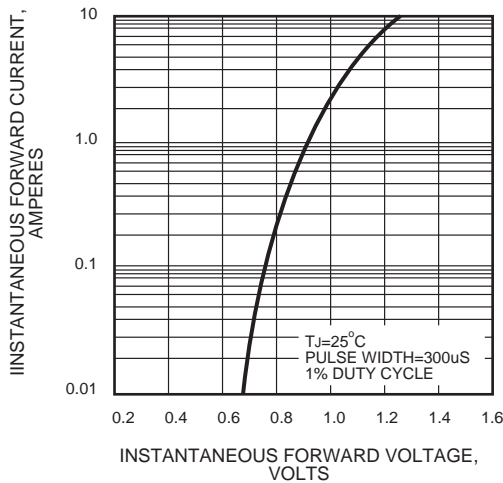


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

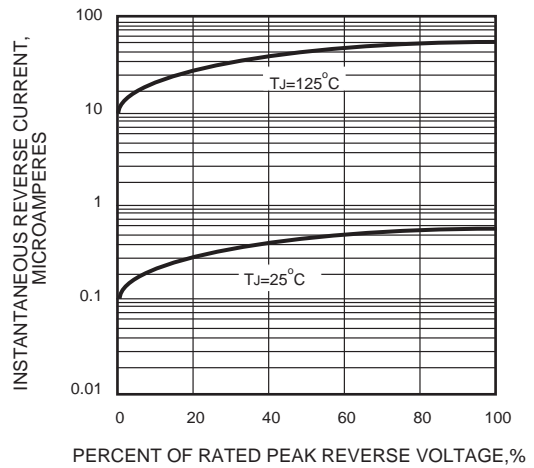


FIG.5 - TYPICAL JUNCTION CAPACITANCE

