

SM5391B THRU SM5399B



1.5 AMP SURFACE MOUNT SILICON RECTIFIERS



FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * High surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.093 gram

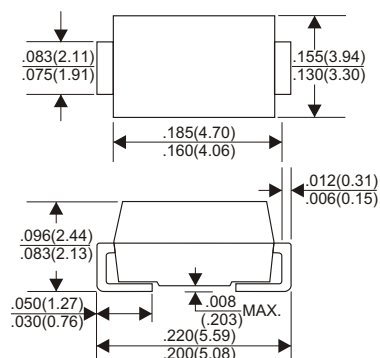
VOLTAGE RANGE

50 to 1000 Volts

CURRENT

1.5 Ampere

DO-214AA(SMB)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SM5391B	SM5392B	SM5393B	SM5395B	SM5397B	SM5398B	SM5399B	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta=75°C	1.5							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	50							A
Maximum Instantaneous Forward Voltage at 1.5A	1.15							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	10.0							μA
Typical Junction Capacitance (Note 1)	30							pF
Typical Thermal Resistance R _{JA} (Note 2)	53							°C/W
Operating and Storage Temperature Range T _J , T _{STG}	-65 — +175							°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (SM5391B THRU SM5399B)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

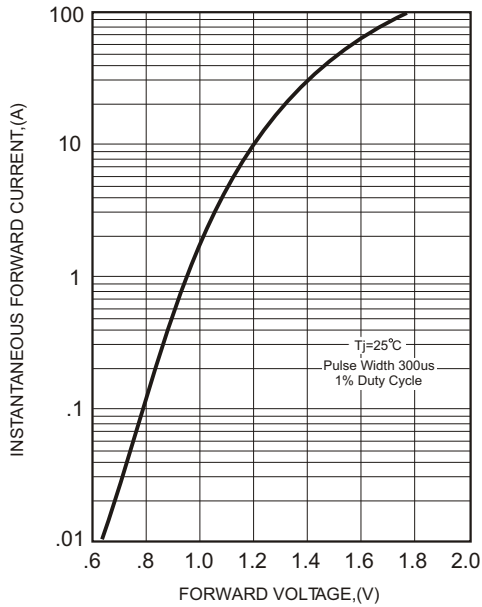


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

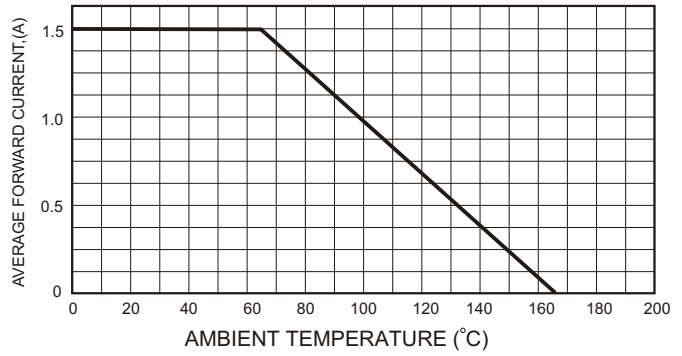


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

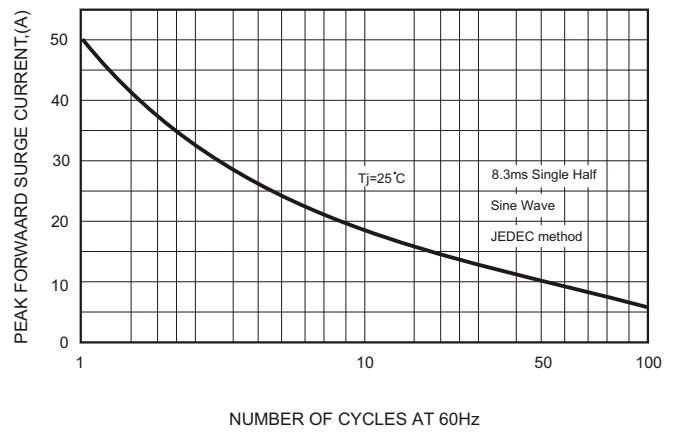


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

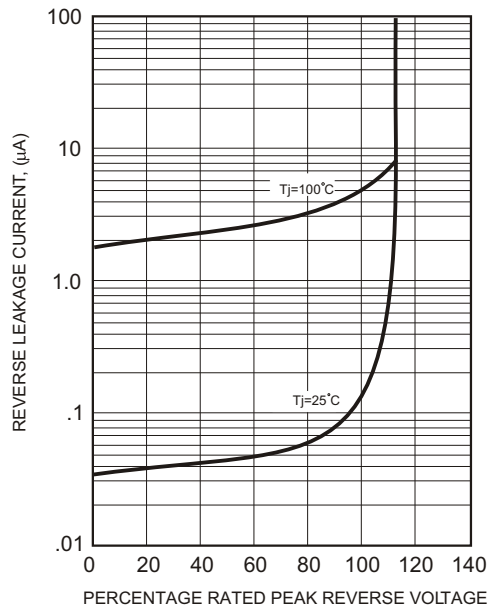


FIG.5-TYPICAL JUNCTION CAPACITANCE

