

S3A THRU S3M

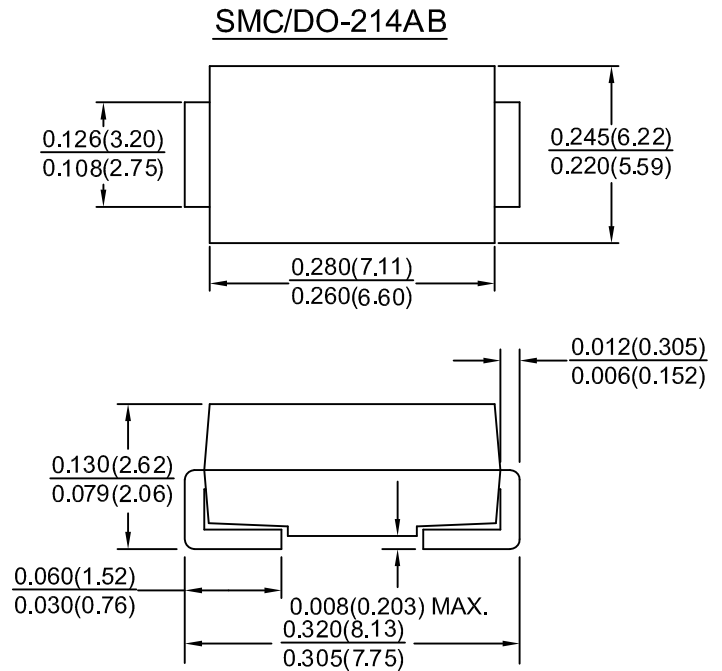
SURFACE MOUNT GLASS PASSIVATED JUNCTION RECTIFIER

FEATURES:

- For surface mounted applications
- Low profile package
- Built-in stain relief
- Easy pick and place
- Flammability Classification
- High temperature soldering:
250°C /10 second at terminals

MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic
 Terminals: Solder plated solderable per MIL-STD-750, Method 2026
 Polarity: Indicated by cathode band
 Standard Packaging: 16mm tape (EIA STD EIA-481)
 Weight: 0.007 ounces, 0.21 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Characteristic	Symbol	S3A	S3B	S3D	S3G	S3J	S3K	S3M	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at $T_L = 75^\circ C$	$I_{(AV)}$	3.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							Amps
Maximum instantaneous forward voltage drop per leg at 3.0A	V_F	1.2							Volts
Maximum DC reverse current at rated DC blocking voltage $T_a = 25^\circ C$ $T_a = 125^\circ C$	I_R	5.0 250.0							μA
Typical Junction Capacitance (NOTE 2)	C_J	60.0							PF
Maximum reverse recovery time (NOTE 1)	TRR	2.5							μs
Typical thermal resistance (NOTE 3)	$R_{th\ JL}$ $R_{th\ JA}$	13 47							$^\circ C/W$
Operating Junction and storage temperature range	T_J, T_{stg}	-65 to +150							$^\circ C$

NOTE :

1. Reverse recovery test conditions: $I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts
3. Thermal resistance junction to case per leg mounted on heatsink

RATINGS AND CHARACTERISTIC CURVES S3ATHRU S3M

