

## PLASTIC SILICON RECTIFIERS

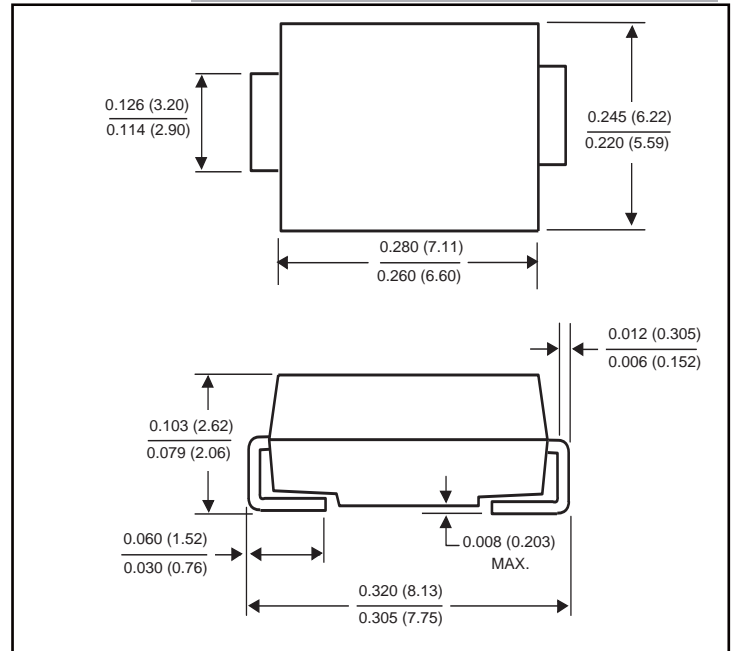
VOLTAGE RANGE: 50 --- 1000 V  
CURRENT: 3.0 A

### FEATURES

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-0 For surface mount applications
- Low profile package
- Built-in strain relief, ideal for automated placement
- Glass passivated chip junction
- High temperature soldering: 260°C/10 seconds at terminals

### MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic body over passivated chip  
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026  
Polarity: Color band denotes cathode end



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted) Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate by 20%.

	SYMBOLS	S3A	S3B	S3D	S3G	S3J	S3K	S3M	UNITS
Device marking code		SA	SB	SD	SG	SJ	SK	SM	
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at T <sub>L</sub> =75°C (NOTE 3)	I <sub>(AV)</sub>	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T <sub>L</sub> =75°C	I <sub>FSM</sub>	100.0							Amps
Maximum instantaneous forward voltage at 2.5A	V <sub>F</sub>	1.15							Volts
Maximum DC reverse current at rated DC blocking voltage T <sub>A</sub> =25°C T <sub>A</sub> =125°C	I <sub>R</sub>	10.0 250.0							μA
Typical reverse recovery time (NOTE 1)	t <sub>rr</sub>	2.5							μs
Typical junction capacitance (NOTE 2)	C <sub>J</sub>	60.0							pF
Typical thermal resistance (NOTE 3)	R <sub>θJA</sub> R <sub>θJL</sub>	47.0 13.0							°C/W
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150							°C

#### NOTES:

- (1) Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES

