

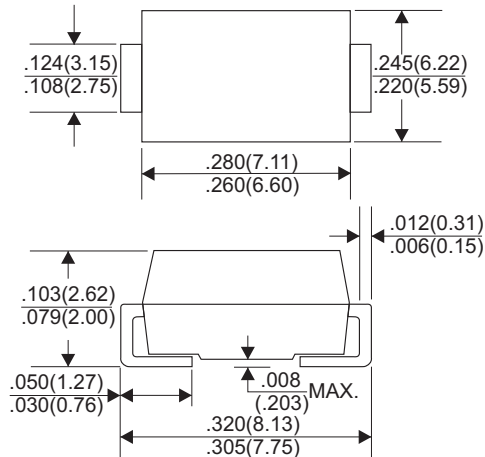


S3A THRU S3M

SUFACE MOUNT GENERAL PURPOSE SILICON RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 3.0 Ampere

DO-214AB(SMC)



Dimensions in inches and (millimeters)

FEATURES

- * Glsaa passivate device
- * Ideal for surface mouted applications
- * Low reverse leakage
- * Metallurgically bonded construction
- * High temperature soldering guaranteed:
250°C/10 seconds 0.375"(9.5mm)lead lenght,
5 lbs.(2.3kg) tension

MECHANICAL DATA

- * Case: JEDEC SMAL molded plastic
- * Terminals: Plated axial leads, solderable per
MIL-STD-750, Method 2026
- * Polarity: Color band denotes cathode end
- * Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	S3A	S3B	S3D	S3G	S3J	S3K	S3M	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 T _L =75°C	3.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	100							A
Maximum Instantaneous Forward Voltage at 3.0A	1.1							V
Maximum DC Reverse Current Ta=25°C	5.0							μA
at Rated DC Blocking Voltage Ta=125°C	250							μA
Typical Junction Capacitance (Note1)	60							pF
Typical Thermal Resistance RθJL (Note 2)	13							°C/W
Operating and Storage Temperature Range T _J , T _{stg}	-65 — +150							°C
Marking Code	S3A	S3B	S3D	S3G	S3J	S3K	S3M	

NOTES:

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

RATING AND CHARACTERISTIC CURVES (S3A THRU S3M)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

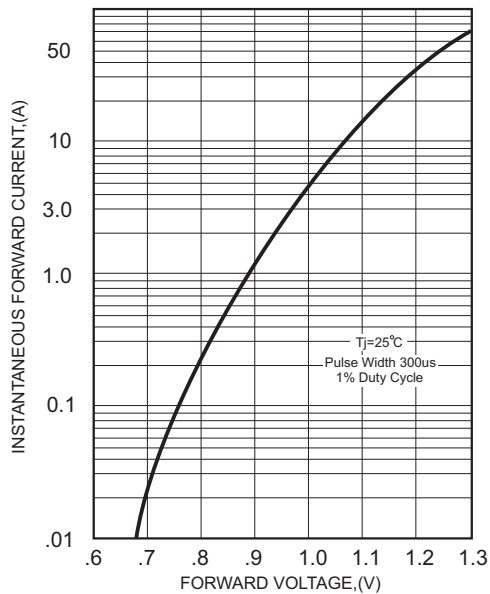


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

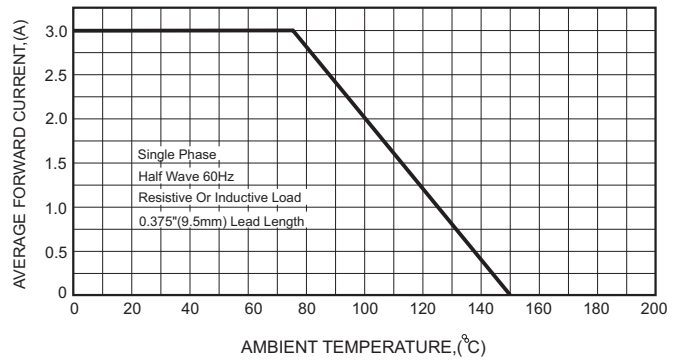


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

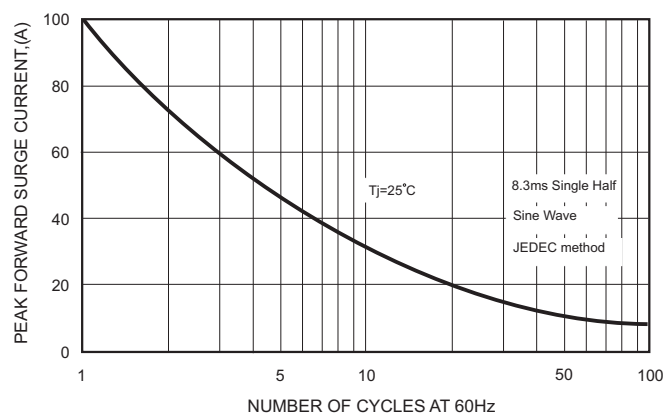


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

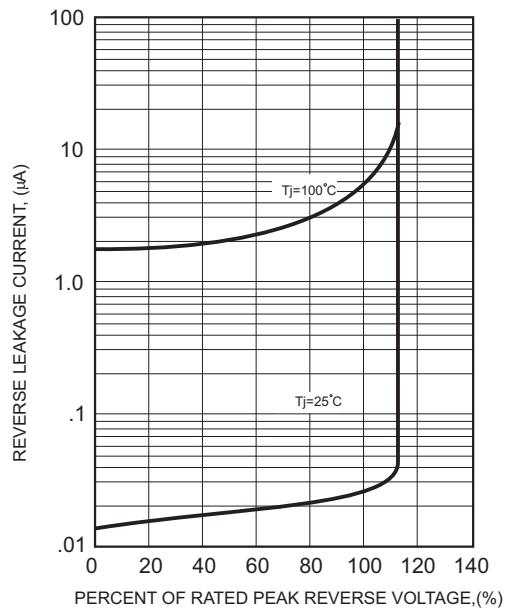


FIG.5-TYPICAL JUNCTION CAPACITANCE

