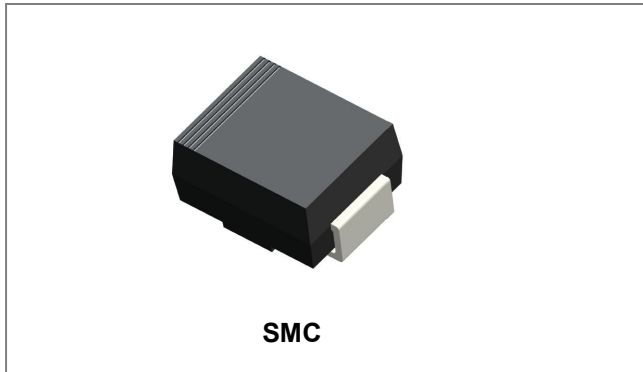


S3A THRU S3M
SURFACE MOUNT GENERAL RECTIFIER
Reverse Voltage - 50 to 1000 Volts Forward Current - 3.0 Amperes



Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 260° C/10 seconds at terminals
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: SMC molded plastic
- Lead: Solder Plated , Solderable Per MIL-STD 750 ,Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.21 grams

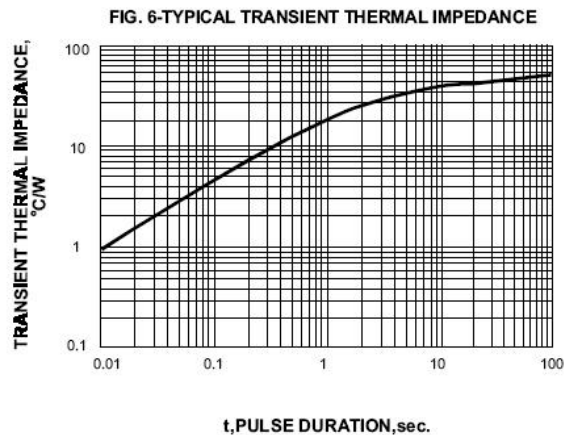
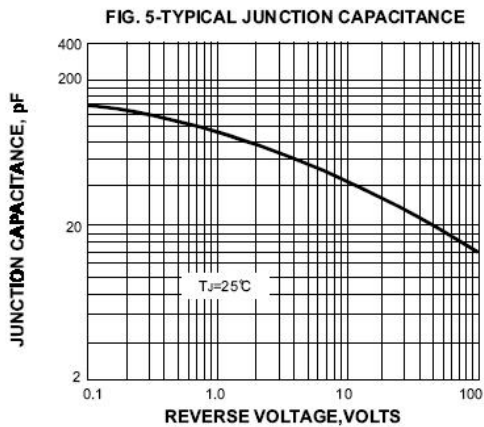
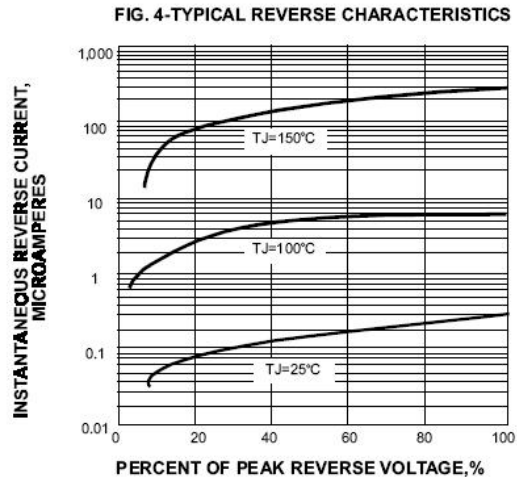
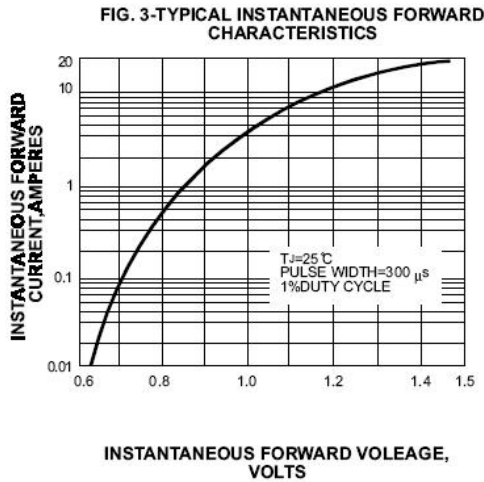
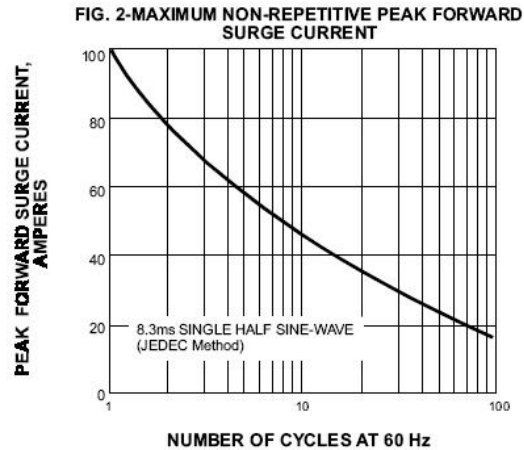
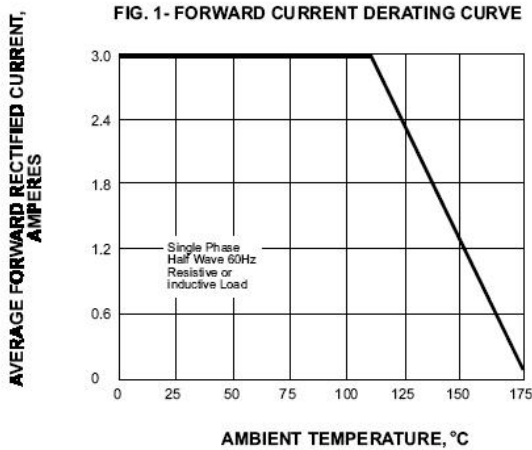
Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

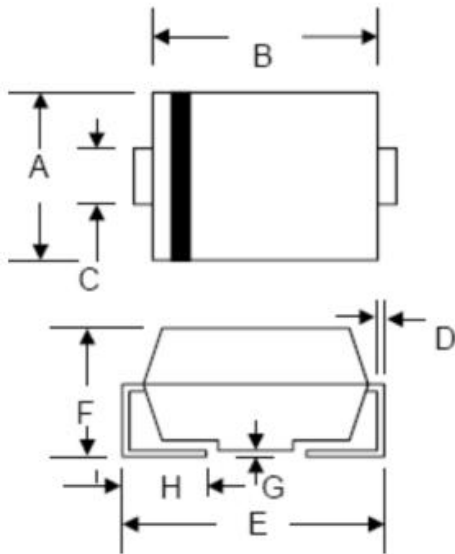
Characteristic	Symbol	S3A	S3B	S3D	S3G	S3J	S3K	S3M	Units
Maximum repetitive peak reverse voltage Maximum DC blocking voltage	V _{RRM} V _{DC}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum average forward rectified current @T _L = 110°C	I _(AV)	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	100.0							A
Maximum instantaneous forward voltage at 3.0A	V _F	1.1							V
Maximum DC reverse current @T _A = 25°C at rated DC blocking voltage @T _A = 100°C	I _R	5.0 100.0							µA
Typical Junction Capacitance (Note 1)	C _J	60.0							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	50.0							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175							°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas.

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •

Ratings and Characteristics Curves



Mechanical Dimensions SMC


SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	5.59	6.22	0.220	0.245
B	6.60	7.11	0.260	0.280
C	2.90	3.20	0.114	0.126
D	0.152	0.305	0.006	0.012
E	7.75	8.13	0.305	0.320
F	2.00	2.62	0.079	0.103
G	-	0.203	-	0.008
H	0.76	1.52	0.030	0.060

Ordering Information

Device	Package	Shipping
S3A-S3M	SMC (Pb-Free)	3000pcs / reel

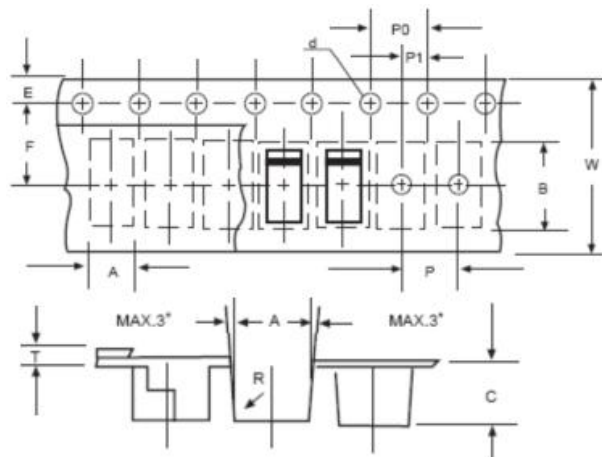
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram


Where XXXXX is YYWWL

S3A = Part Name
 YY = Year
 WW = Week
 L = Lot Number

Cautions: Molding resin
 Epoxy resin UL:94V-0

Carrier Tape Specification SMC


SYMBOL	Millimeters	
	Min.	Max.
A	5.90	6.10
B	8.20	8.40
C	2.40	2.60
d	1.40	1.60
E	1.40	1.60
F	7.60	7.70
P	7.90	8.10
P0	3.90	4.10
P1	3.90	4.10
T	-	0.600
W	15.80	16.20

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