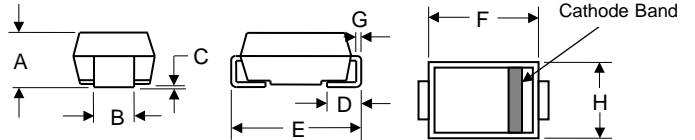


### Features

- \* Glass passivated chip junction
- \* Ideal for automated placement
- \* Low forward voltage drop
- \* High current capability
- \* High surge current capability



RoHS  
COMPLIANT



DO-214AB (SMC)				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.081	0.103	2.06	2.62
B	0.114	0.126	2.90	3.20
C	---	0.008	---	0.20
D	0.030	0.060	0.76	1.52
E	0.305	0.320	7.75	8.13
F	0.260	0.280	6.60	7.11
G	0.006	0.012	0.152	0.305
H	0.220	0.245	5.59	6.22

### Mechanical Data

- \* Case: DO-214AB (SMC)
- \* Molding compound, UL flammability classification rating 94V-0
- \* Moisture sensitivity level: level 1, per J-STD-020
- \* Terminal: Matte tin plated leads, solderable per JESD22-B102  
Meet JESD 201 class 2 whisker test
- \* Polarity: Indicated by cathode band
- \* Weight: 0.21 g (approximately)

### Maximum Ratings And Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	S5A	S5B	S5D	S5G	S5J	S5K	S5M	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V

#### Maximum Ratings And Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	S5A	S5B	S5D	S5G	S5J	S5K	S5M	UNIT
Maximum average forward rectified current	I <sub>F(AV)</sub>	5							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	100							A
Maximum instantaneous forward voltage (Note 1) I <sub>F</sub> = 5 A	V <sub>F</sub>	1.1							V
Maximum reverse current @ rated V <sub>R</sub> T <sub>J</sub> =25°C	I <sub>R</sub>	5							μA
T <sub>J</sub> =125°C		250							
Typical reverse recovery time (Note 2)	t <sub>rr</sub>	1.5							μs
Typical junction capacitance (Note 3)	C <sub>J</sub>	60							pF
Typical thermal resistance	R <sub>θJL</sub>	13							°C/W
	R <sub>θJA</sub>	47							
Operating junction temperature range	T <sub>J</sub>	- 55 to +150							°C
Storage temperature range	T <sub>STG</sub>	- 55 to +150							°C

Note 1: Pulse test with PW=300μs, 1% duty cycle

Note 2: Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

### Ratings and Characteristic Curves

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

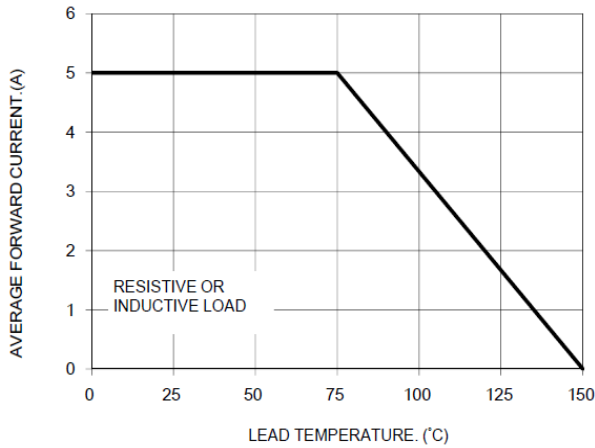


FIG.2- TYPICAL REVERSE CHARACTERISTICS

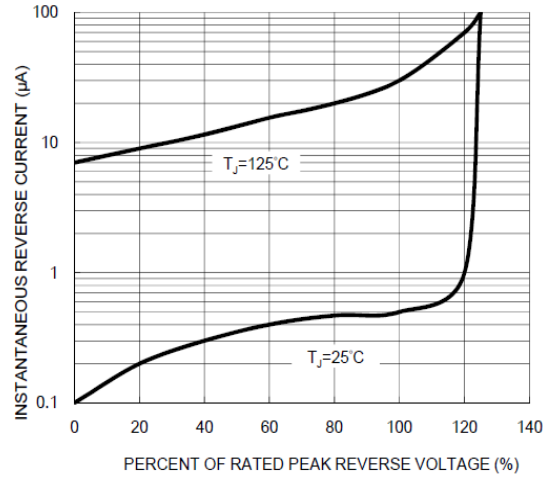


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

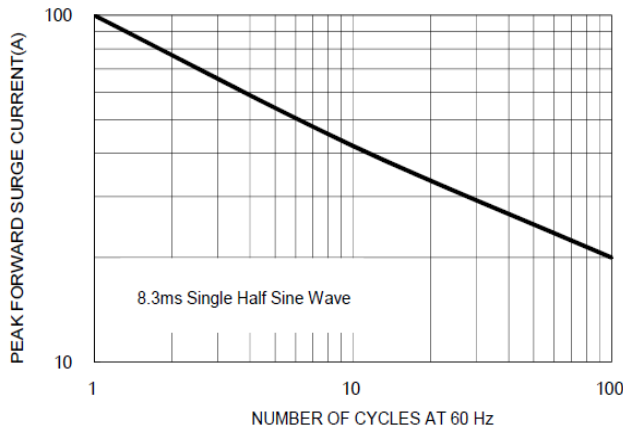


FIG.4 TYPICAL FORWARD CHARACTERISTICS

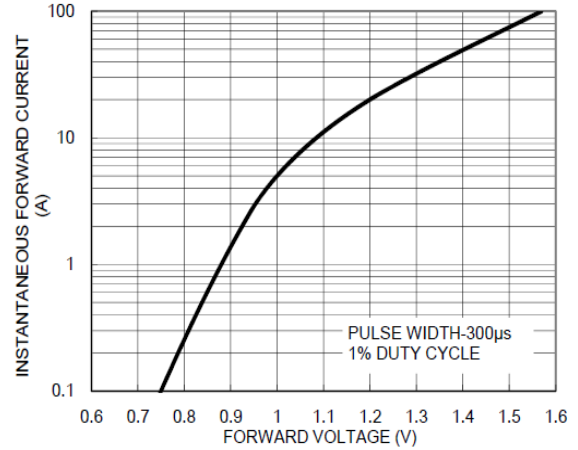


FIG.5 TYPICAL JUNCTION CAPACITANCE

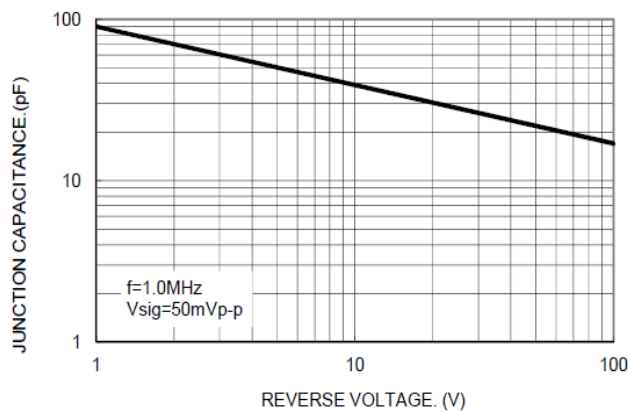
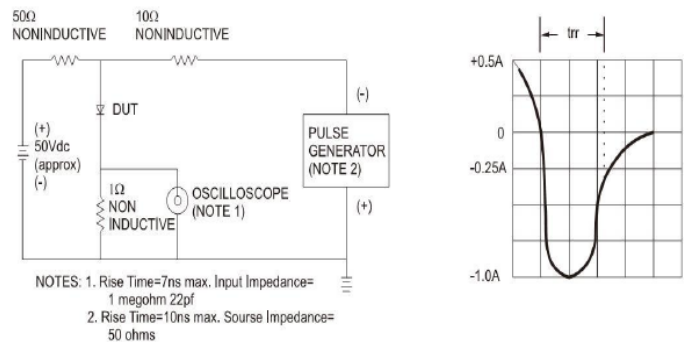


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





## S5A THRU S5M

### 5A, 50V - 1000V Surface Mount Rectifiers

#### Ordering Information

Part No.	Package	Packing Code	Packing
S5A - S5M	DO-214AB (SMC)	R30	3000pcs/Reel

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