

## FEATURES

- Plastic package has Underwrites Laboratory Flammability Classification 94V-0
- Metal-Silicon Junction
- For surface mount applications
- Guard ring for over voltage protection
- High forward surge current capability
- Super Low forward voltage
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

## MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-750 method 2026
- Mounting position: Surface Mounted
- Weight: 0.007 ounce, 0.25 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	S6A	S6B	S6D	S6G	S6J	S6K	S6M	UNIT	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts	
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	720	Volts	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts	
Maximum Average Forward Rectified Current	$I_{(AV)}$	6.0							Amp	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	120							Amps	
Maximum Instantaneous Forward Voltage at 6.0A (Note 1)	$V_F$	1.2							Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	$I_R$							10	u A
	$T_A = 100^\circ\text{C}$								100	
Maximum reverse recovery time(Note 2)	$T_{rr}$	>800							us	
Typical Thermal Resistance	$R_{\theta JL}$	10							°C/W	
	$R_{\theta JA}$	100							°C/W	
Operating Temperature Range	$T_J$	-55 to +150							°C	
Storage Temperature Range	$T_{STG}$	-55 to +150							°C	

### Notes:

1. Pulse test: 300µs pulse width, 1% duty cycle
2. Test conditions :  $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$

## RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

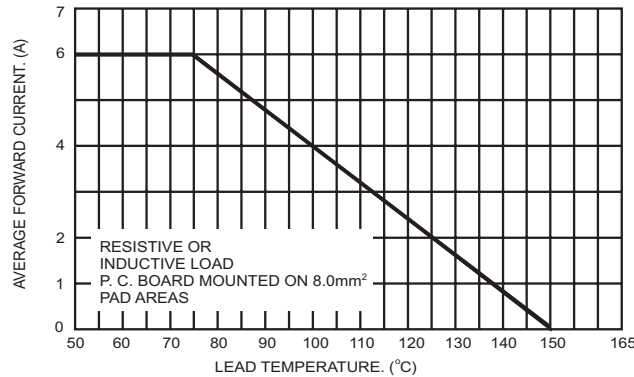


FIG.2- TYPICAL FORWARD CHARACTERISTICS

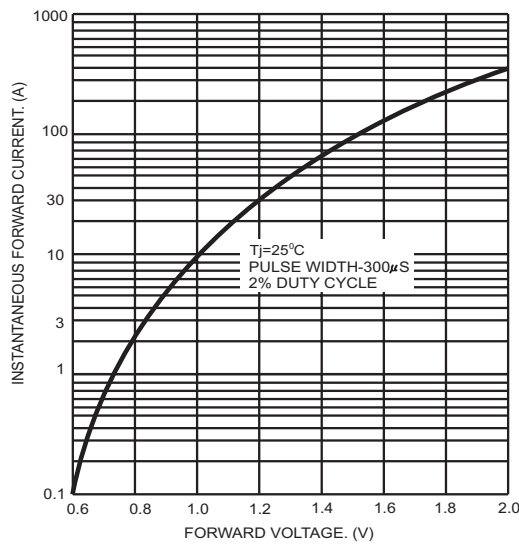


FIG.3- TYPICAL REVERSE CHARACTERISTICS

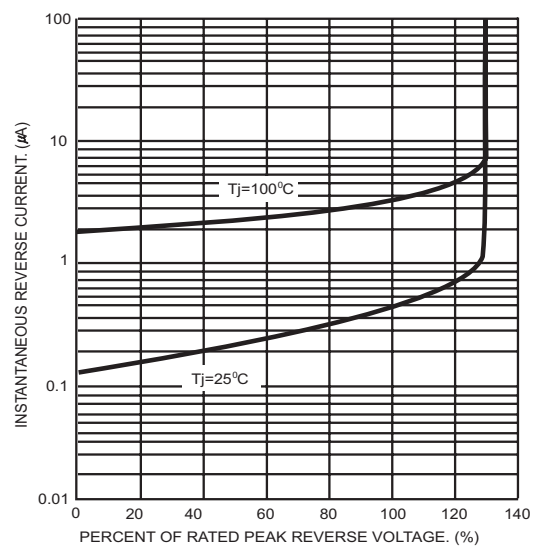


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

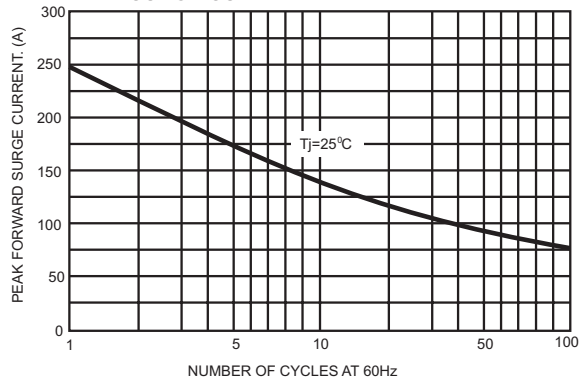
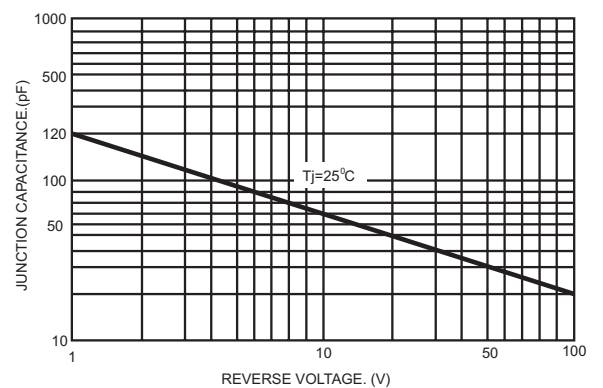


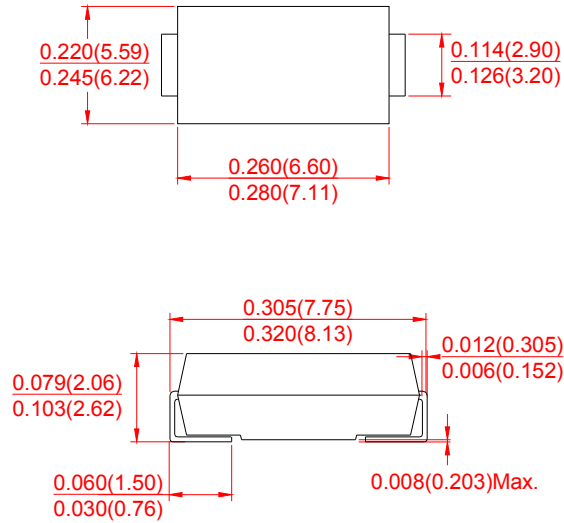
FIG.5- TYPICAL JUNCTION CAPACITANCE



## OUTLINE DIMENSION

All Dimension in inches and (millimeters)

### SMC(DO-214AB)



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMC	3000/REEL	42000	36X36X36.5	18.50	15.50

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Diodes - General Purpose, Power, Switching category](#):*

*Click to view products by [LGE manufacturer](#):*

Other Similar products are found below :

[MMBD3004S-13-F](#) [RD0306T-H](#) [DSE010-TR-E](#) [BAV17-TR](#) [BAV19-TR](#) [1N3611](#) [NTE156A](#) [NTE574](#) [NTE6244](#) [1SS181-TP](#) [1SS193,LF](#)  
[1SS400CST2RA](#) [SDAA13](#) [SHN2D02FUTW1T1G](#) [LS4151GS08](#) [FC903-TR-E](#) [1N4449](#) [1N456A](#) [1N4934-E3/73](#) [1N914B](#) [1N914BTR](#)  
[1SS226-TP](#) [RFUH20TB3S](#) [D291S45T](#) [BAV300-TR](#) [BAW56DWQ-7-F](#) [BAW75-TAP](#) [MM230L-CAA](#) [IDW40E65D1](#) [JAN1N3600](#) [LL4151-](#)  
[GS18](#) [053684A](#) [SMMSD4148T3G](#) [707803H](#) [NSVDAN222T1G](#) [CDSZC01100-HF](#) [LL4150-M-08](#) [1N4454-TR](#) [BAV199E6433HTMA1](#)  
[BAS28-7](#) [BAW56HDW-13](#) [BAS28 TR](#) [VS-HFA04SD60STR-M3](#) [NSVM1MA152WKT1G](#) [RGP30D-E3/73](#) [BAV99TQ-13-F](#) [BAS21DWA-7](#)  
[NTE6250](#) [NTE582-4](#) [NTE582-6](#)