

Schottky Barrier Rectifier 3A DO-214AB SMC

S3xC Series

MERITEK

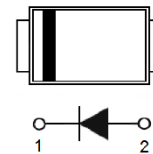
FEATURES

- Glass Passivated Die Construction
- Low Power Loss, High Efficiency
- Low Profile Package
- High Current Capacity
- Application: Switching Mode Power Supply, Lighting Application, Adapters, Converter



MECHANICAL DATA

- Case: DO-214AB (SMC), Molded Plastic
- UL Flammability Classification Rating 94V-0
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Color Band Denotes Cathode End



ELECTRICAL CHARACTERISTICS

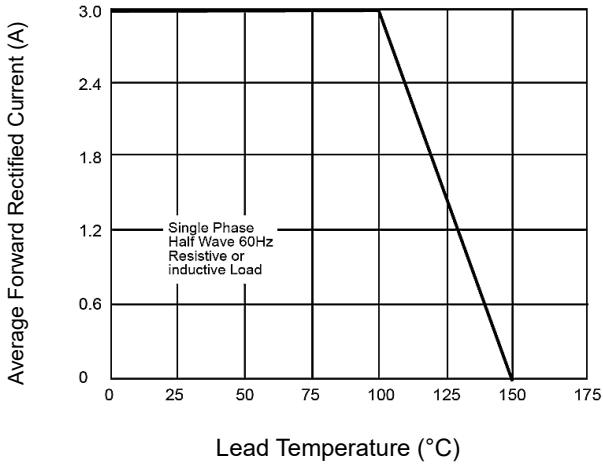
Parameter	Symbol	S3AC	S3BC	S3DC	S3GC	S3JC	S3KC	S3M	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum Continuous Reverse Voltage	V_R	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (See Fig. Typical Forward Current Derating Curve)	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100							A
Maximum Forward Voltage at $I_F=3.0A$	V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage	$V_R=V_{RRM}, T_A=25^\circ C$	0.5							μA
	$V_R=V_{RRM}, T_A=100^\circ C$	5.0							
Typical Thermal Resistance-Junction to Ambient	$R_{\theta JA}$	50							$^\circ C/W$
Diode Junction Capacitance at $f=1MHz$ and Applied 4V DC Reverse Voltage	C_J	60							pF
Operating Junction Temperature Range	T_J	-55 to +150							$^\circ C$
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ C$

Note:

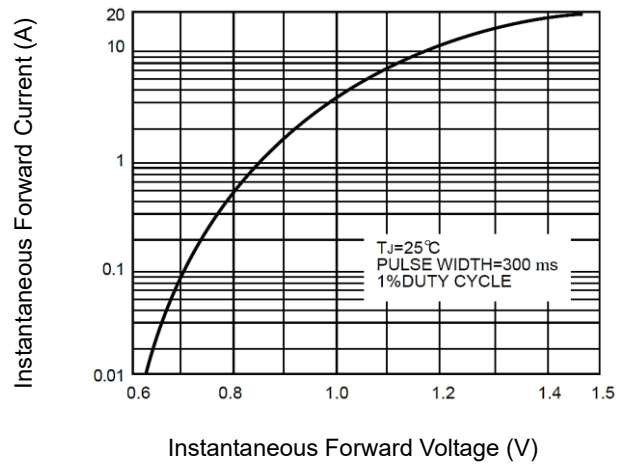
1. Ratings at 25°C ambient temperature unless otherwise specified.
2. Thermal resistance from junction to lead mounted on P.C.B. with 0.2 x 0.2 (5 x 5 mm) copper pad areas

CHARACTERISTIC CURVES

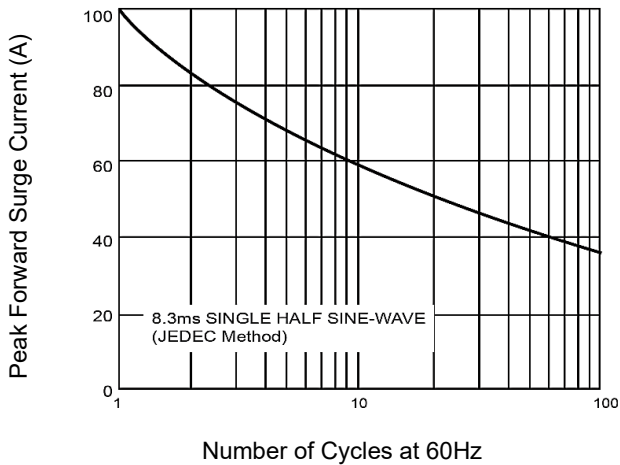
Typical Forward Current Derating Curve



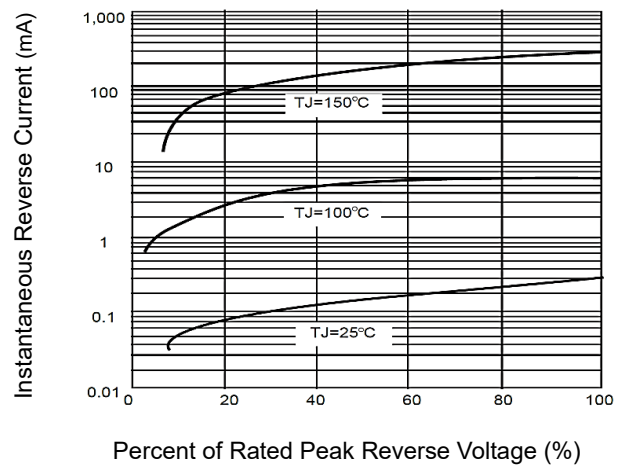
Typical Instantaneous Forward Characteristics



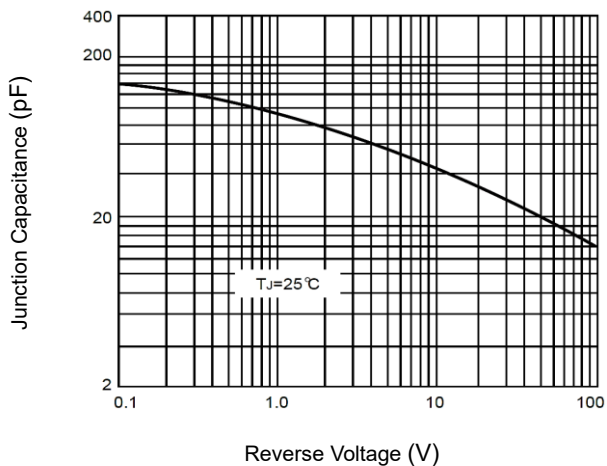
Maximum Non-Repetitive Forward Surge Current



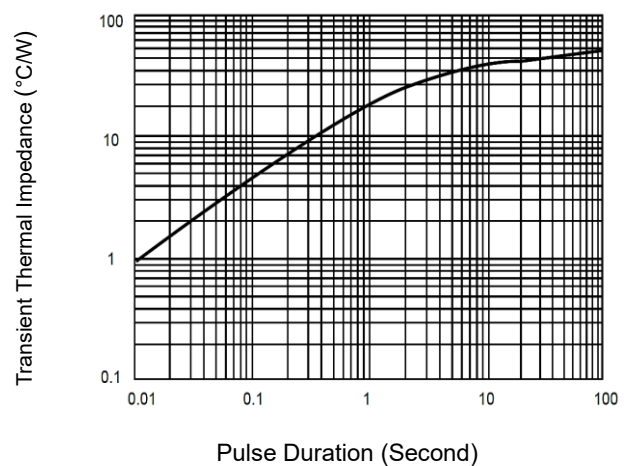
Typical Reverse Characteristics



Typical Junction Capacitance



Typical Transient Thermal Impedance



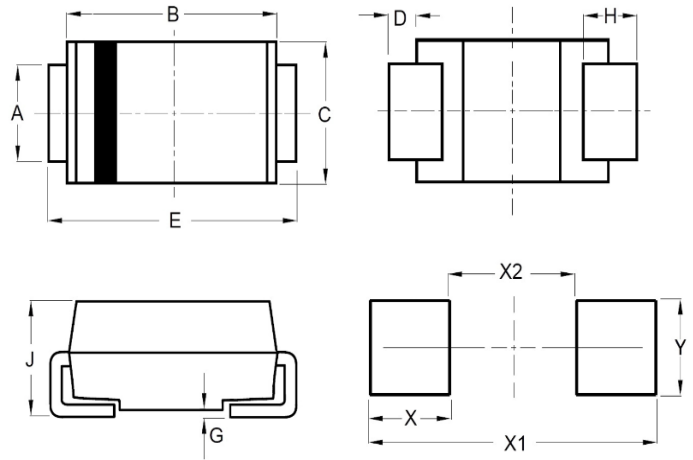
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DIMENSIONS

Item	Min (mm)	Max (mm)
A	2.900	3.200
B	6.600	7.110
C	5.590	6.720
D	0.152	0.305
E	7.750	8.130
G	0.000	0.203
H	0.760	1.520
J	2.060	2.620
X	2.500	
X1	6.900	
X2	4.400	
Y	3.300	



*Specifications subject to change without notice