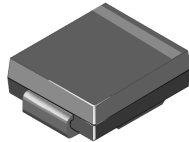


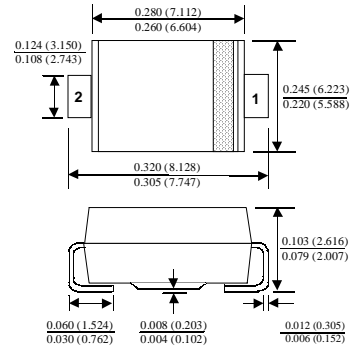
SS32 - S310

Features

- Metal to silicon rectifiers, majority carrier conduction.
- Low forward voltage drop.
- Easy pick and place.
- High surge current capability.



SMC/DO-214AB



3.0 Ampere Schottky Barrier Rectifiers

Absolute Maximum Ratings*

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
I_O	Average Rectified Current @ $T_A = 75^\circ\text{C}$	3.0	A
$i_{f(\text{surge})}$	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	100	A
P_D	Total Device Dissipation Derate above 25°C	2.27 18	W mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient**	55	$^\circ\text{C}/\text{W}$
$R_{\theta JC}$	Thermal Resistance, Junction to Case	17	$^\circ\text{C}/\text{W}$
T_{stg}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	-55 to +150	$^\circ\text{C}$

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

**Device mounted on FR-4 PCB 0.55 x 0.55" (14 x 14 mm).

Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

Parameter	Device								Units
	32	33	34	35	36	38	39	310	
Peak Repetitive Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	14	21	28	35	42	56	63	70	V
DC Reverse Voltage (Rated V_R)	20	30	40	50	60	80	90	100	V
Maximum Reverse Current $T_A = 25^\circ\text{C}$	0.5								mA
@ rated V_R $T_A = 100^\circ\text{C}$	20			10					mA
Maximum Forward Voltage @ 3.0 A	500			750		850			mV

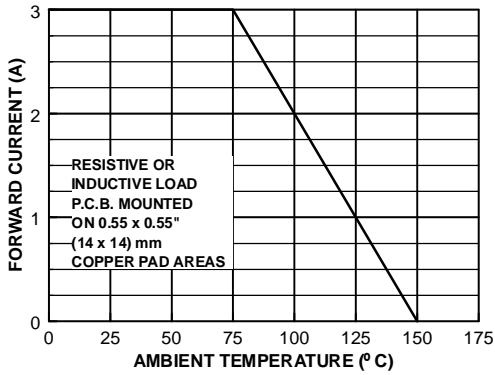
Surface Mount Schottky Barrier Rectifiers

(continued)

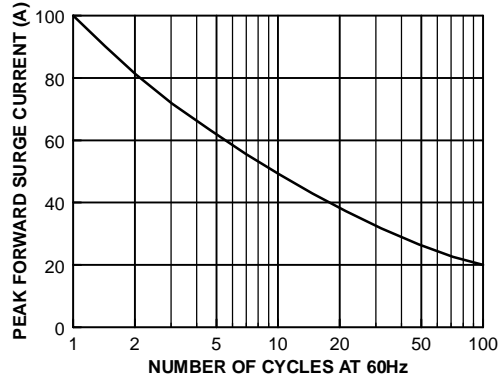
SS32-SS310

Typical Characteristics

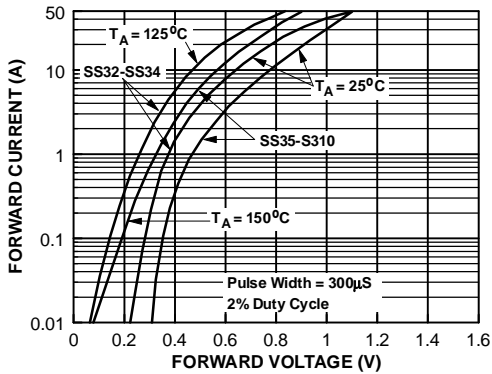
Forward Current Derating Curve



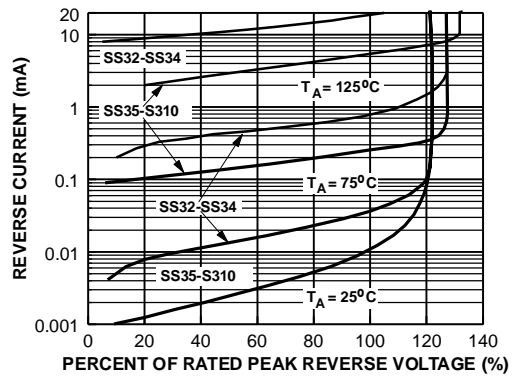
Non-Repetitive Surge Current



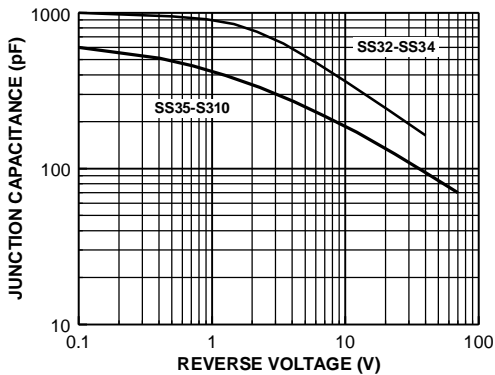
Forward Characteristics



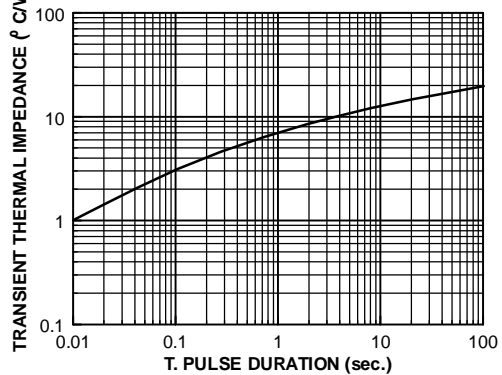
Reverse Characteristics



Typical Junction Capacitance



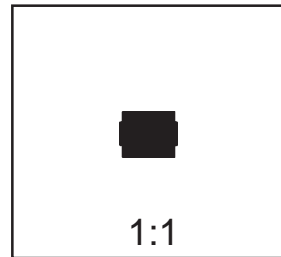
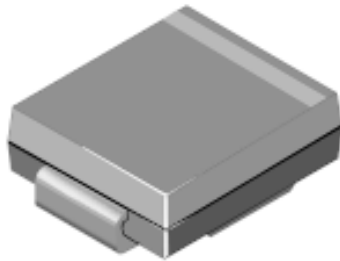
Transient Thermal Impedance



SMC/DO-214AB Package Dimensions



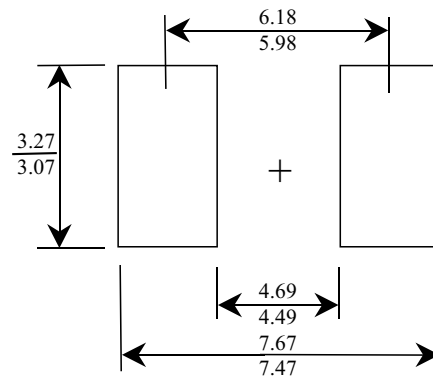
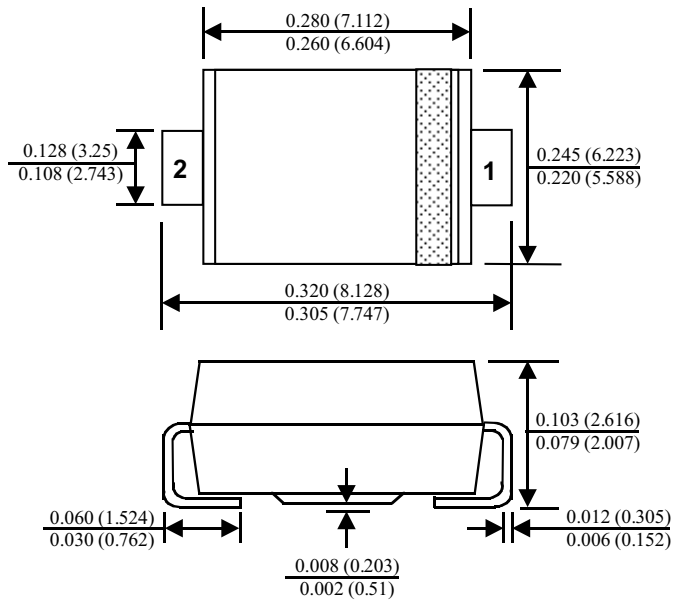
SMC/DO-214AB (FS PKG Code P7)



Scale 1:1 on letter size paper

Dimensions shown below are in:
inches [millimeters]

Part Weight per unit (gram): 0.21



Minimum Recommended
Land Pattern

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FASTr™	SuperSOT™-3	
GTO™	SuperSOT™-6	
HiSeC™	SuperSOT™-8	

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