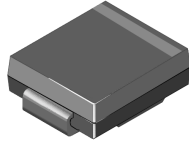


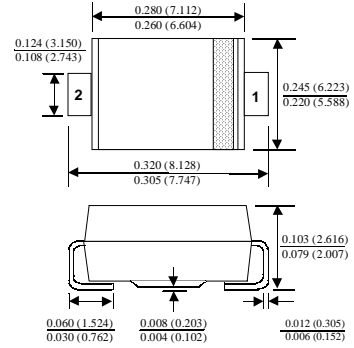
## SS32 - S310

### 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 $25^\circ\text{C}$	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	$^\circ\text{C}/\text{W}$
$T_{\text{stg}}$	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

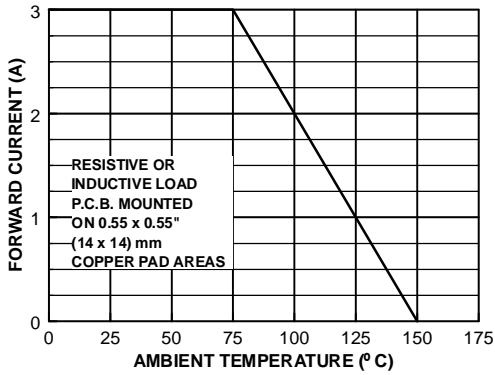
# Surface Mount Schottky Barrier Rectifiers

(continued)

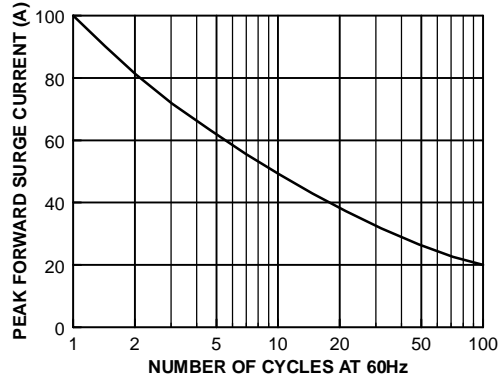
SS32-SS310

## Typical Characteristics

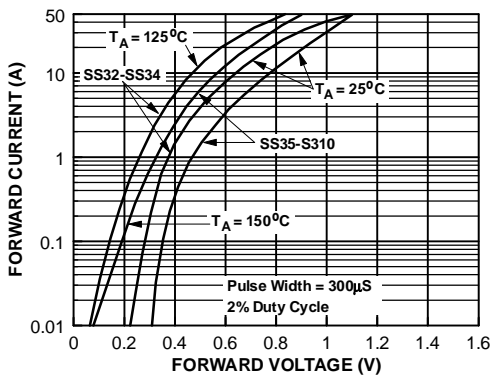
### Forward Current Derating Curve



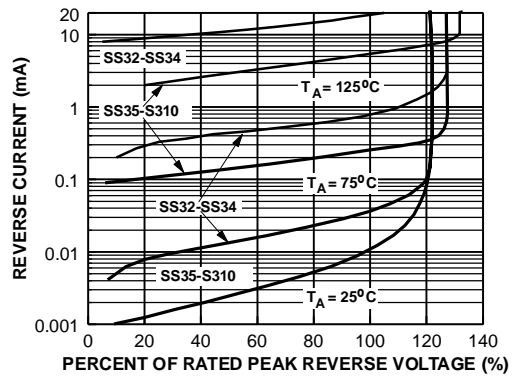
### Non-Repetitive Surge Current



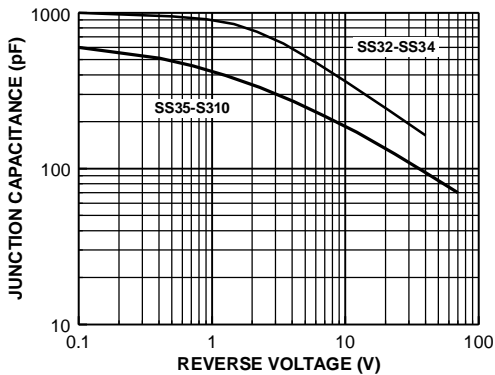
### Forward Characteristics



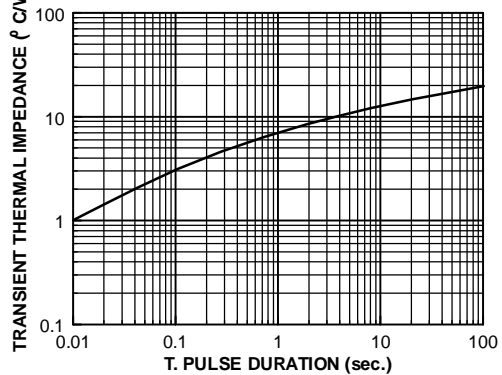
### Reverse Characteristics



### Typical Junction Capacitance



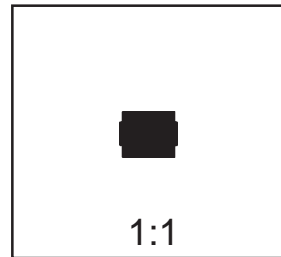
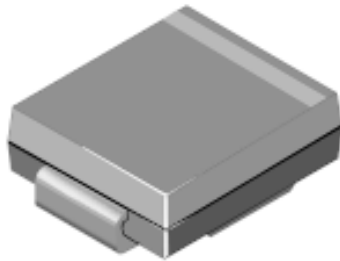
### Transient Thermal Impedance



# SMC/DO-214AB Package Dimensions



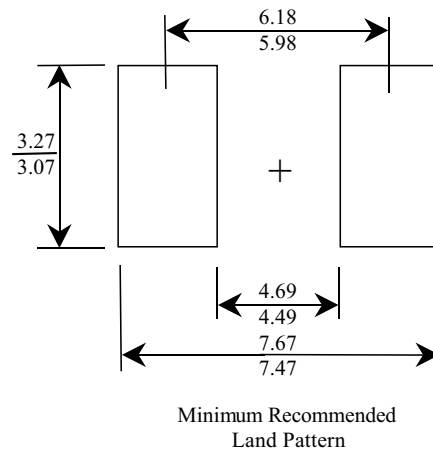
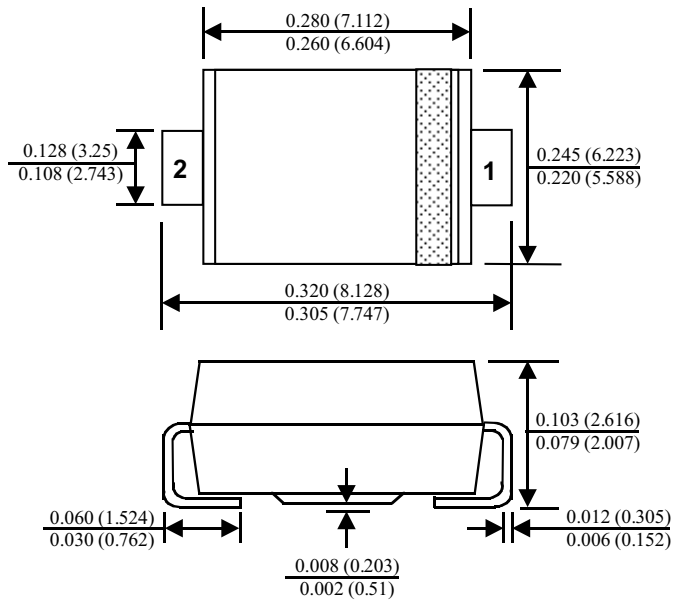
## SMC/DO-214AB (FS PKG Code P7)



Scale 1:1 on letter size paper

Dimensions shown below are in:  
inches [millimeters]

Part Weight per unit (gram): 0.21



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FACT™	QFET™	
FACT Quiet Series™	QS™	
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FASTr™	SuperSOT™-3	
GTO™	SuperSOT™-6	
HiSeC™	SuperSOT™-8	

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