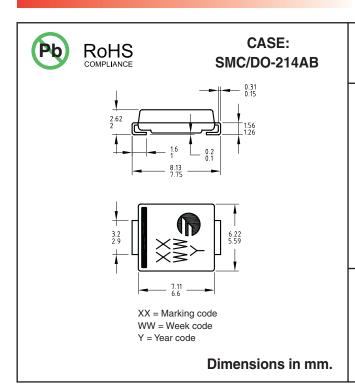


## 3 Amp. Surface Mount Schottky Barrier Rectifiers



Voltage	Current
20 V to 150 V	3.0 A

- For surface mounted application
- Easy pick and place
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High current capability. low VF
- High surge current capability
- Plastic material used carriers Underwraiters Laboratory Classification 94V-0
- Epitaxial construction
- High temperature soldering: 260 °C / 10 seconds at terminals

#### **MECHANICAL DATA**

Case: JEDEC DO-214AB Molded plastic Terminals: Pure tin plated, lead free Polarity: Indicated by cathode band Packaging: 16 mm tape EIA-STD RS-481.

Weight: 0.21 g.

### Maximum Ratings and Electrical Characteristics at 25 °C

		FSS 32	FSS 33	FSS 34	FSS 35	FSS 36	FSS 39	FSS 310	FSS 315	
	Marking code	C1	C2	СЗ	C4	C5	C6	<b>C</b> 7	C8	
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	20	30	40	50	60	90	100	150	
V <sub>RMS</sub>	Maximum RMS Voltage (V)	14	21	28	35	42	63	70	105	
$V_{DC}$	Maximum DC Blocking Voltage (V)	20	30	40	50	60	90	100	150	
I <sub>F(AV)</sub>	Maximum Average Forward Rectified Current at T <sub>L</sub> (See graphic)	3.0 A								
I <sub>FSM</sub>	8.3 ms.Peak Forward Surge Current (Jedec Method)	100 A 70				70 A	) A			
Tj	Operating Temperature Range	-55°C to +125°C			-55°C to +150°C					
T <sub>stg</sub>	Storage Temperature Range	-55°C to +150°C								

### Electrical Characteristics at Tamb = 25 °C

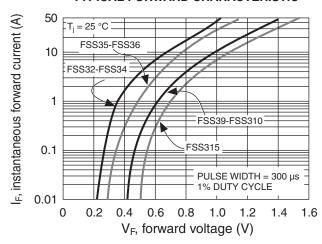
	Maximum Instantaneous Forward Voltage							
V <sub>F</sub>	(Note 1) I <sub>F</sub> = 3.0 A @ 25 °C	0.5 V	0.75 V	0.85 V	0.95 V			
	@ 100 °C	0.4 V	0.65 V	0.70 V	0.80 V			
	Maximum DC Reverse Current Ta = 25 °C at	0.5 mA	0.1 mA					
I <sub>R</sub>	Rated DC Blocking Voltage Ta =125°C	10 mA	5.0 mA	0.5 mA				
C <sub>j</sub>	Typical Junction Capacitance (Note 3)	600 pF 290 pF 200 pF						
R <sub>th (j-l)</sub>	Typical Thermal Resistance (Note 2)	17 °C/W						
R <sub>th (j-a)</sub>		55 °C/W						

- 1. Pulse Test With PW = 300 µsec, 1% Duty Cycle
- 2. Measured on P.C. Board with 16mm x16mm Copper Pad Areas
- 3. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.



## **Rating And Charasterictic Curves**

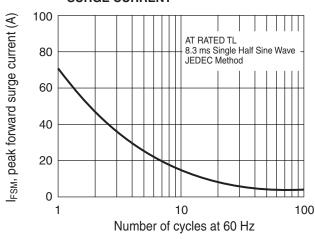
#### TYPICAL FORWARD CHARACTERISTIC



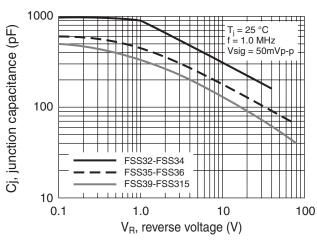
## MAXIMUM FORWARD CURRENT DERATING CURVE

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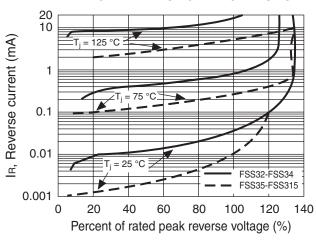
# MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



#### TYPICAL JUNCTION CAPACITANCE



### TYPICAL REVERSE CHARACTERISTIC



## TYPICAL TRANSIENT THERMAL CHARACTERISTIC

