

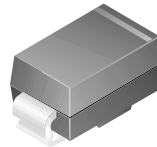


# SS12 - S100

SS12-S100

## Features

- Glass passivated junctions.
- High current capability, low  $V_F$ .
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.



**SMA/DO-214AC**  
COLOR BAND DENOTES CATHODE

## Schottky Rectifiers

### Absolute Maximum Ratings\*

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

Symbol	Parameter	Value								Units
		12	13	14	15	16	18	19	100	
$V_{RRM}$	Maximum Repetitive Reverse Voltage	20	30	40	50	60	80	90	100	V
$I_{F(AV)}$	Average Rectified Forward Current .375 " lead length @ $T_A = 75^\circ\text{C}$	1.0								A
$I_{FSM}$	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	40								A
$T_{stg}$	Storage Temperature Range	-65 to +150								$^\circ\text{C}$
$T_J$	Operating Junction Temperature	-65 to +125								$^\circ\text{C}$

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

### Thermal Characteristics

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	1.1	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient *	88	$^\circ\text{C/W}$

\*Device mounted on FR-4 PCB 0.013 mm.

### Electrical Characteristics

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

Symbol	Parameter	Device								Units
		12	13	14	15	16	18	19	100	
$V_F$	Forward Voltage @ 1.0 A	500		700		850				mV
$I_R$	Reverse Current @ rated $V_R$ $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	0.2				10				mA mA

Typical Characteristics

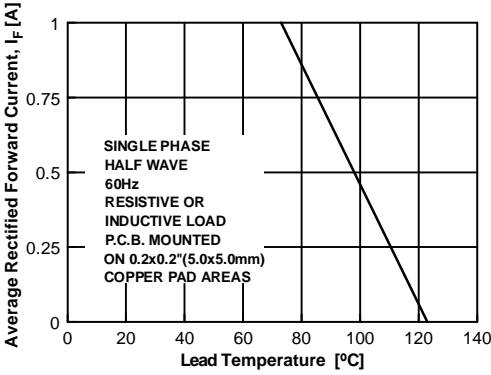


Figure 1. Forward Current Derating Curve

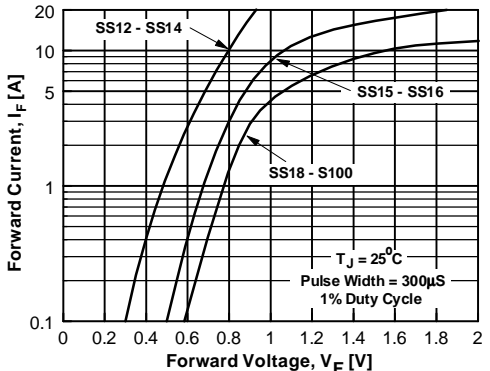


Figure 2. Forward Voltage Characteristics

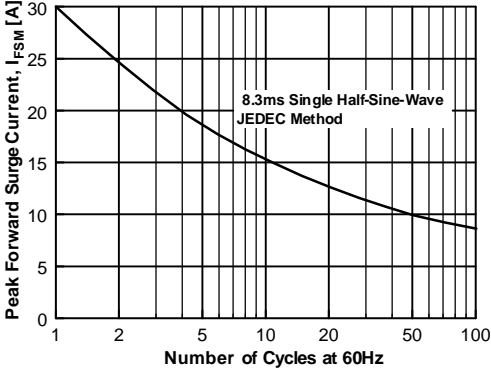


Figure 3. Non-Repetitive Surge Current

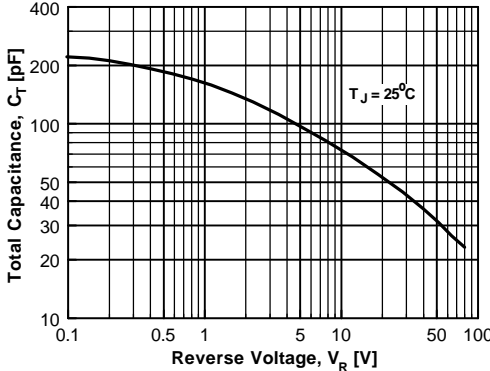


Figure 4. Total Capacitance