

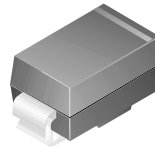


SS12 - S100

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	$^\circ\text{C}/\text{W}$

*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

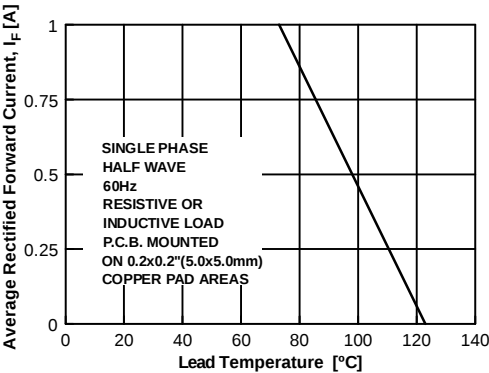


Figure 1. Forward Current Derating Curve

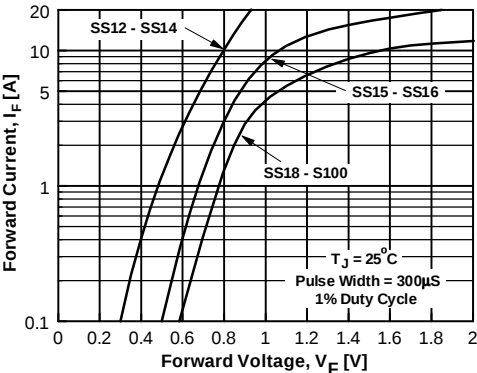


Figure 2. Forward Voltage Characteristics

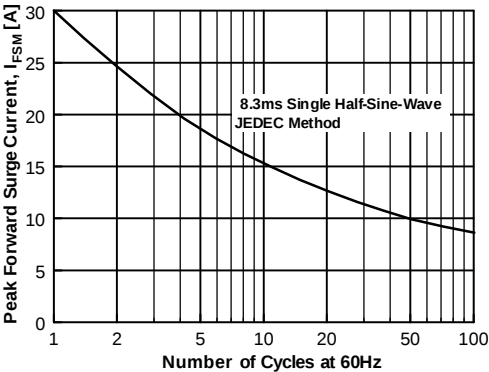


Figure 3. Non-Repetitive Surge Current

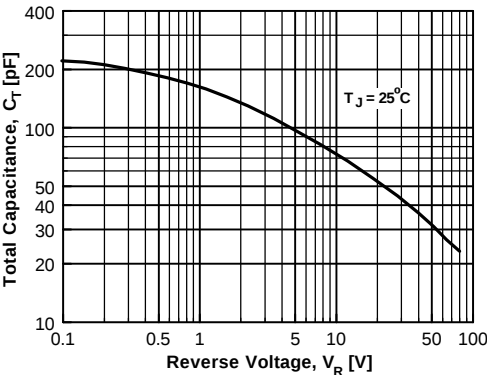


Figure 4. Total Capacitance

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