

SS12-T thru SS120-T

Reverse Voltage 20 ~ 200 V

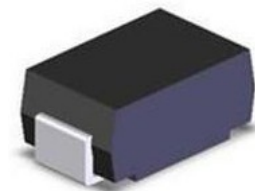
Automotive Surface Mounted Schottky Barrier Rectifiers

PROSEMI offers AEC-Q101 qualified Schottky Barrier Rectifiers is specially designed to protect sensitive electronic devices from lightning and other transient voltage induced voltage transient events.



Features

- Low reverse leakage
- High forward surge capability
- High reliability
- High temperature soldering guaranteed:
260 °C/10seconds
- Lead and body according with RoHS standard
- Green compound with suffix "-F" on Marking



DO-214AC/SMA

Mechanical Data

- Case:DO-214AC Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free
- System: Accreditation through IATF16949 System
- High reliability grade (AEC Q101 qualified)

Maximum Ratings & Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

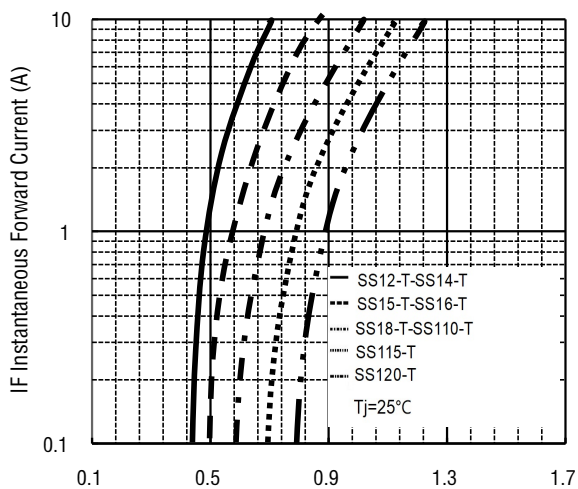
Parameter	Symbols	SS12-T	SS13-T	SS14-T	SS15-T	SS16-T	SS18-T	SS110-T	SS115-T	SS120-T	Unit		
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V		
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V		
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V		
Maximum average forward rectified current	$I_{F(AV)}$	1.0									A		
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	I_{FSM}	30									A		
@ $I_F=1.0A$ Maximum forward voltage	V_F	0.55			0.70		0.85		0.92		0.95	V	
@ V_{DC} Maximum reverse current	I_R	0.5				0.1							mA
		20				10							
Typical thermal resistance (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	85					25						°C/W
VR=4.0V,f=1MHz Type junction capacitance	C_J	90									pF		
Operating junction	T_J	-55 --- +125					-55 --- +150						°C
Storage temperature rang	T_{STG}	-55 --- +150									°C		

Note:

1) Thermal resistance from junction to ambient , PCB mounted.

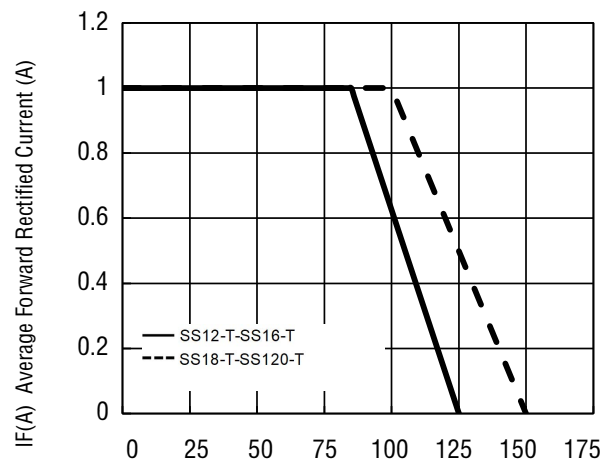
Characteristic Curves

TYPICAL FORWARD CHARACTERISTIC



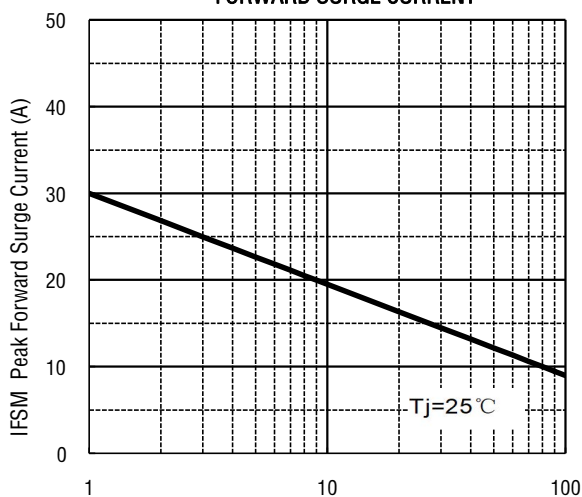
VF Instantaneous Forward Voltage (V)

FORWARD CURRENT DERATING CURVE



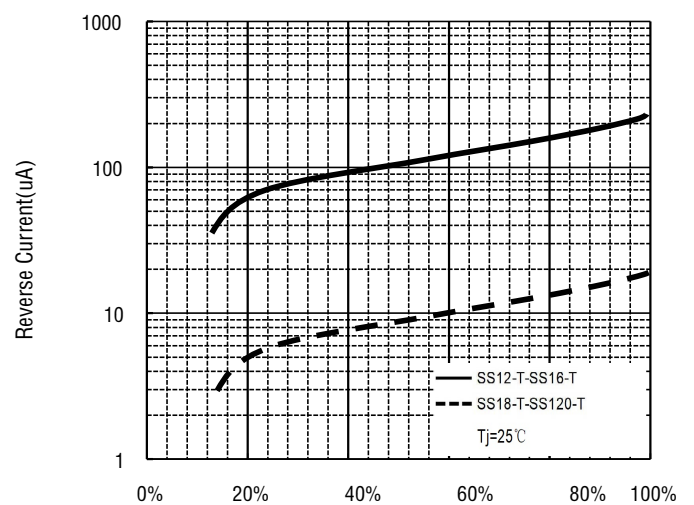
T_c , Case temperature ($^\circ\text{C}$)

MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



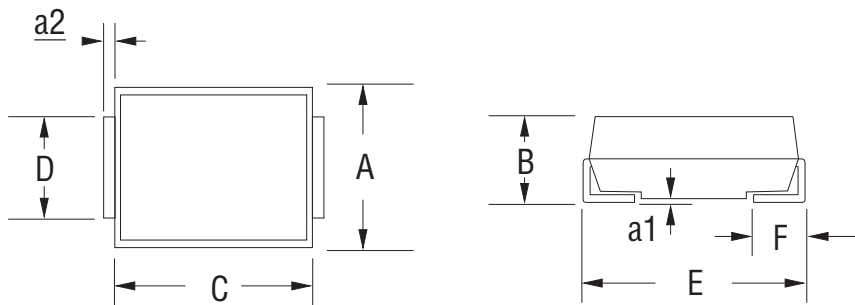
Number of Cycles at 60 Hz.

TYPICAL REVERSE CHARACTERISTICS



Percent Of Rated Peak Reverse voltage %

Dimension (Unit: mm)



A		B		C		D		E		F		a1		a2	
Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
2.500	2.800	1.900	2.450	3.900	4.600	1.400	1.800	4.800	5.280	0.760	1.520	-	0.203	0.145	0.255

Packaging

- Quantity: 3,000pcs
- 16mm wide tape on 330mm(13 inch) diameter reel –specification EIA Standard 481.