SENSITRON
SEMICONDUCTOR

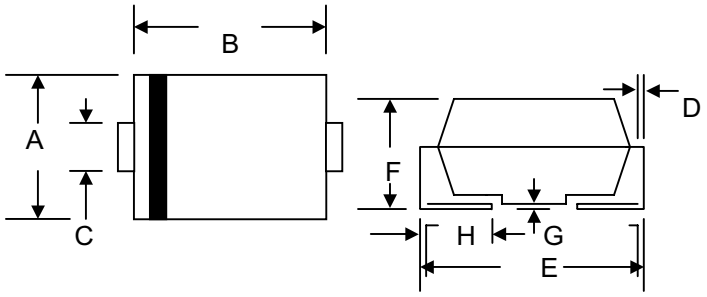
SS12-S100

1.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Data Sheet 3200, Rev. A

Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 30A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O



Mechanical Data

- Case: Low Profile Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)

SMA/DO-214AC		
Dim	**Min**	**Max**
A	0.098(2.50)	0.114(2.90)
B	0.157(4.00)	0.181(4.60)
C	0.055(1.40)	0.063(1.60)
D	0.006(0.15)	0.012(0.31)
E	0.189(4.80)	0.208(5.28)
F	0.079(2.00)	0.096(2.44)
G	0.002(0.05)	0.008(0.20)
H	0.030(0.76)	0.060(1.52)
All Dimensions in inch(mm)		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	SS12	SS13	SS14	SS15	SS16	SS18	SS19	S100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	80	90	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	64	71	V
Average Rectified Output Current @T_L = 130°C	I_O	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30								A
Forward Voltage @I_F = 1.0A	V_{FM}	0.50			0.70		0.85			V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	0.5 10								mA
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	88								°C/W
Operating Temperature Range	T_J	-65 to +150								°C
Storage Temperature Range	T_{STG}	-65 to +150								°C

Note: 1. Mounted on P.C. Board with 5.0mm^2 copper pad areas

• 221 West Industry Court ▯ Deer Park, NY 11729-4681 ▯ (631) 586-7600 FAX (631) 242-9798 •
• World Wide Web Site - http://www.sensitron.com • E-Mail Address - sales@sensitron.com •

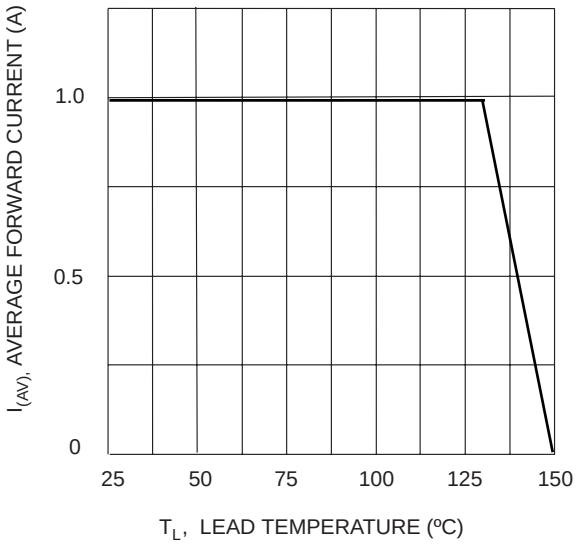


Fig. 1 Forward Current Derating Curve

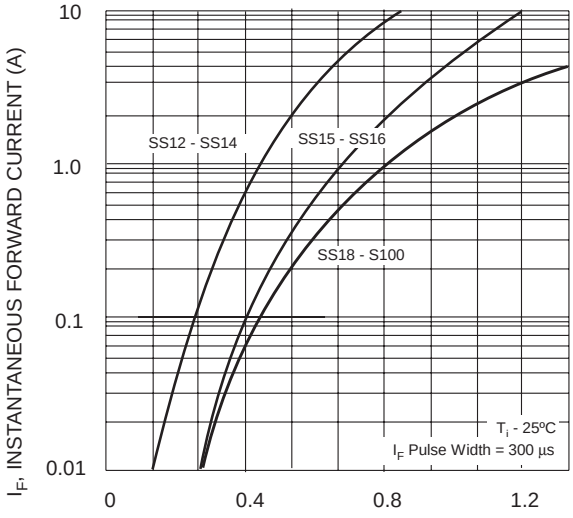


Fig. 2 Typ. Forward Characteristics

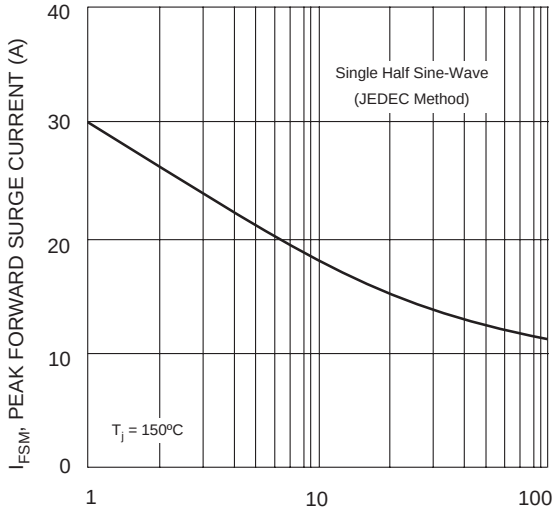


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

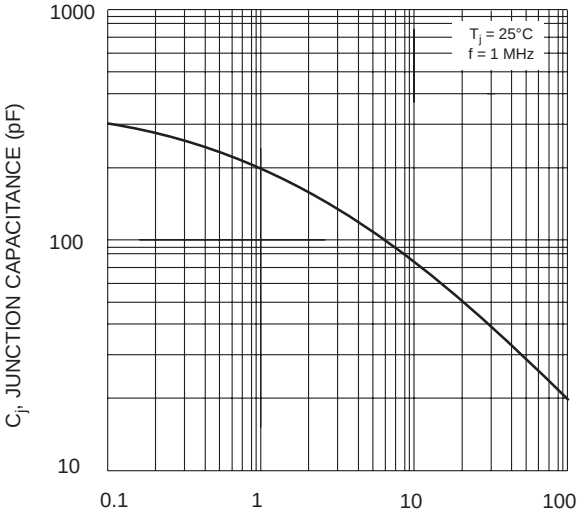


Fig. 4 Typical Junction Capacitance

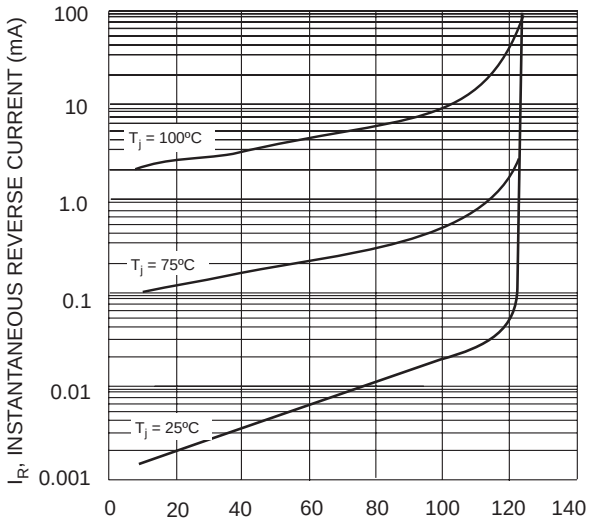


Fig. 5 Typical Reverse Characteristics

TECHNICAL DATA

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