SS12 THRU S100

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER VOLTAGE - 20 to 100 Volts CURRENT - 1.0 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier majority carrier conduction
- Low power loss, High efficiency
- High current capability, low V_F
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering:
 260 ¢J/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic

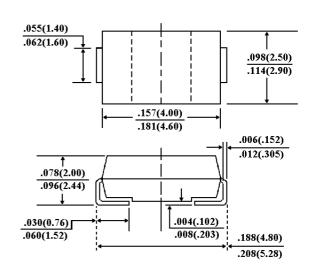
Terminals: Solder plated, solderable per MIL-STD-750,

Method 2026

Polarity: Color bank denotes cathode Standard packaging: 12mm tape (EIA-481)

Weight: 0.002 ounce, 0.064 gram

SMA/DO-214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified. Resistive or inductive load.

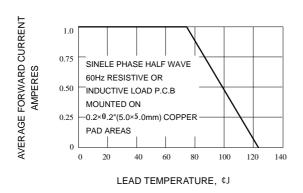
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	SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS19	S100	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	64	71	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	Volts
Maximum Average Forward Rectified Current	I _(AV)	1.0								Amps
at T _L (See Figure 1)										
Peak Forward Surge Current 8.3ms single half sine-	I _{FSM}	30.0								Amps
wave superimposed on rated load(JEDEC method)										
Maximum Instantaneous Forward Voltage at 1.0A	V_{F}	0.5			0.	0.70		0.85		Volts
(Note 1)										
Maximum DC Reverse Current T _A =25 ¢J (Note 1)	I_R	0.5								mΑ
At Rated DC Blocking Voltage T _A =100 ¢J		20.0								
Maximum Thermal Resistance (Note 2)	R £KJL	28								¢J/W
	R £KJA	88								
Operating Junction Temperature Range	TJ	-50 to +125								¢J
Storage Temperature Range	T _{STG}	-50 to +150								¢J
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NOTES:

- 1. Pulse Test with PW=300 £g sec, 2% Duty Cycle.
- 2. Mounted on P.C.Board with 5.0mm² (.013mm thick) copper pad areas.



RATING AND CHARACTERISTIC CURVES SS12 THRU S100



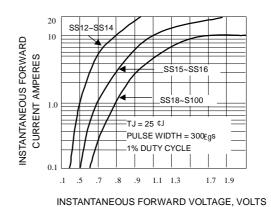


Fig. 1-FORWARD CURRENT DERATING CURVEE

Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

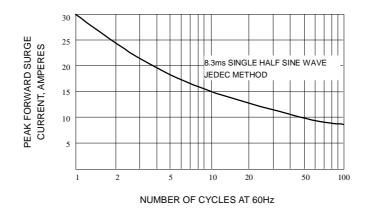


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

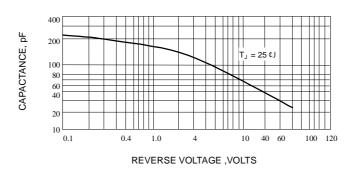


Fig. 4-TYPICAL JUNCTION CAPACITANCE

