

SS12 THRU SS110 1A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

1 Features

- Plastic package has Underwriters LF 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 surge capacity
- High current capacity ,low VF
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications.
- High temperature soldering guaranteed: 260°C /10 seconds at terminals
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- Pb free product at available : 99% Sn above meet RoHS environment substance directive request



2 Mechanical Data

- Case : JEDEC DO-214AC molded plastic
- Terminals : Solderable per MIL-STD-750, METHOD 2026
- Polarity : Cathode Indicated by color band
- Weight : 0.064 Grams

3 Absolute Maximum Ratings (T_C = 25°C unless otherwise noted)

| Symbol | Parameter | SS12 | SS13 | SS14 | SS15 | SS16 | SS18 | SS19 | SS110 | Units |
|--------------------------------------|--|--------------|------|------|------|------|------|------|-------|-------|
| V _{RRM} | Maximum recurrent peak reverse voltage | 20 | 30 | 40 | 50 | 60 | 80 | 90 | 110 | V |
| V _{RMS} | Maximum rms voltage | 14 | 21 | 28 | 35 | 42 | 56 | 64 | 71 | V |
| V _{DC} | Maximum DC blocking voltage | 20 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | V |
| I _O | Maximum average forward rectified current at TL | 1.0 | | | | | | | | A |
| I _{FSM} | Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | 30 | | | | | | | | A |
| R _{θJL} R _{θJA} | Maximum thermal resistance(Note 1) | 28.0 88.0 | | | | | | | | °C/W |
| T _{STG} | Storage temperature range | -55 to +150 | | | | | | | | °C |
| T _{OP} | Operating temperature range | -55 to +150 | | | | | | | | °C |

* note :

1. Measured at 1.0MHz and applied reverse of 4.0V D.C.

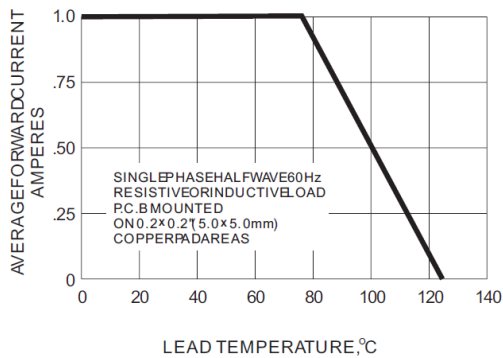
4 Electrical Characteristics (T_C = 25°C unless otherwise noted)

| Symbol | Parameter | SS12 | SS13 | SS14 | SS15 | SS16 | SS18 | SS19 | SS110 | Units | |
|----------------|---|------|------|------|------|------|------|------|-------|-------|----|
| V _F | Maximum forward voltage at I _o =1.0A | 0.5 | | | 0.7 | | 0.85 | | | V | |
| I _R | Maximum DC reverse current (Note 1) Ta= 25 °C at Rated DC Blocking Voltage Ta=100°C | 0.5 | | | | | 20.0 | | | | mA |

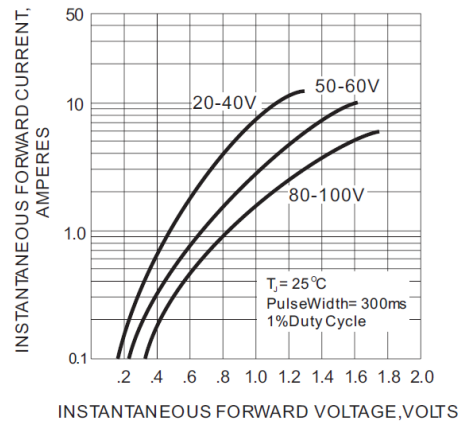
Note :

1. A.Pulse Test with PW =300µsec, 2% Duty Cycle

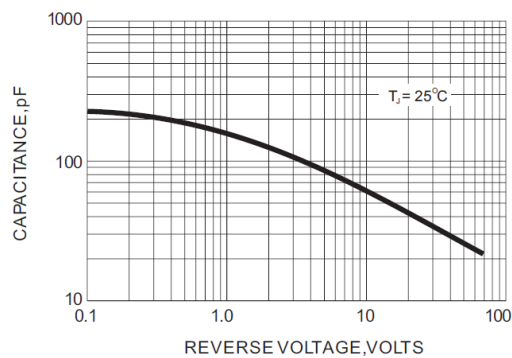
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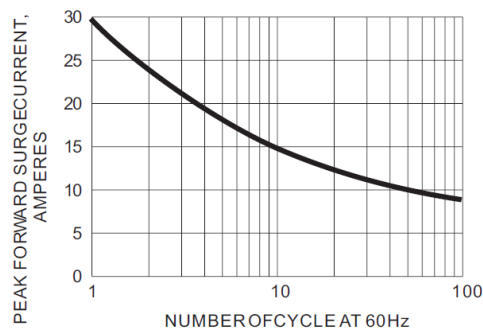
FORWARD CURRENT DERATING CURVE



TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC



TYPICAL JUNCTION CAPACITANCE



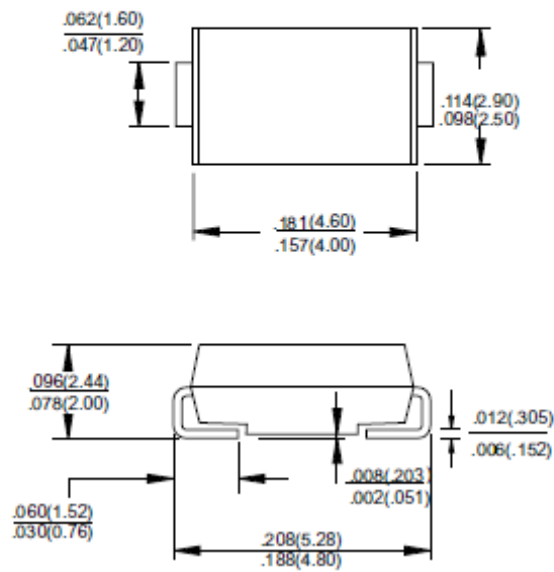
MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

DEVICE SPECIFICATION

SS12 THRU SS110 1A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

6. Package Dimensions

SMA/DO-214AC Unit: inch(mm)





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Note

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