

Micro Commercial Components

Features

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SD103AWS THRU SD103CWS

Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

- Guard Ring Construction for Transient Protection
- Negligible Reverse recovery time
- Low Reverse Capacitance and Low Forward Voltage Drop
- Marking: SD103AWS: S4, SD103BWS: S5, SD103CWS: S6
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

400mW Small Signal Schottky Diode 20 to 40 Volts

Maximum Ratings

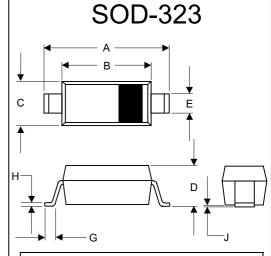
- Operating Temperature: -65° to +125°
 Storage Temperature: -65° to +125°
- Maximum Thermal Resistance; 300°C/W Junction to Ambient

| MCC Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|---|------------------------|-----------------------------------|
| SD103AWS | 40V | 28V | 40V |
| SD103BWS | 30V | 21V | 30V |
| SD103CWS | 20V | 14V | 20V |

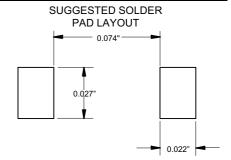
SD103CWS 20V 14V 20V Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward Current | I _{F(AV)} | 350mA | Note 1 |
|---|--------------------|----------------|--|
| Peak Forward Surge Current | I _{FSM} | 1.5A | t≦1.0s |
| Maximum Power Dissipation | P_{D} | 200mW | Note 1 |
| Maximum Instantaneous Forward Voltage | V _F | 0.37V 0.60V | I _{FM} = 20mA I _{FM} = 200mA |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I _R | 5.0µA | V _R = 30V (AWS) V _R = 20V (BWS) V _R = 10V (CWS) |
| Typical Junction Capacitance | C _j | 50pF | Measured at 1.0MHz, V _R =0V |
| Typical Reverse Recovery Time | t _{rr} | 10ns | $I_F = I_R = 200 \text{mA}$ $I_{rr} = 0.1 \times I_R R_L = 100 \Omega$ |

Note: 1.Valid provided that electrodes are kept at ambient Temperature

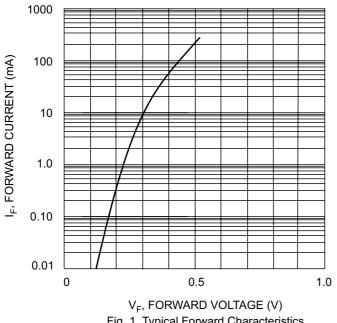


| DIMENSIONS | | | | | |
|------------|--------|------|------|------------|------|
| DIM | INCHES | | N | I M | NOTE |
| | MIN | MAX | MIN | MAX | |
| Α | .090 | .107 | 2.30 | 2.70 | |
| В | .063 | .071 | 1.60 | 1.80 | |
| С | .045 | .053 | 1.15 | 1.35 | |
| D | .031 | .045 | 0.80 | 1.15 | |
| Е | .010 | .016 | 0.25 | 0.40 | |
| G | .004 | .018 | 0.10 | 0.45 | |
| Н | .004 | .010 | 0.10 | 0.25 | |
| J | | .006 | | 0.15 | |



SD103AWS thru SD103CWS





100 Cj, CAPACITANCE (pF) 10 1.0 0.1 20 30 40 V_R, REVERSE VOLTAGE (V)

Fig. 1 Typical Forward Characteristics

Fig. 2 Typ. Junction Capacitance vs Reverse Voltage



Ordering Information

| Device | Packing |
|------------------|---------------------|
| (Part Number)-TP | Tape&Reel3Kpcs/Reel |

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