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SD101AWS THRU SD101CWS

Small Signal Schottky Diodes

Features

- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)
- Low Reverse Recovery Time
- Low Reverse Capacitance
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection

Mechanical Data

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Polarity: Indicated by Cathode Band
- Marking : SD101AWS---S1 ; SD101BWS---S2; SD101CWS---S3

Maximum Ratings @ 25°C Unless Otherwise Specified

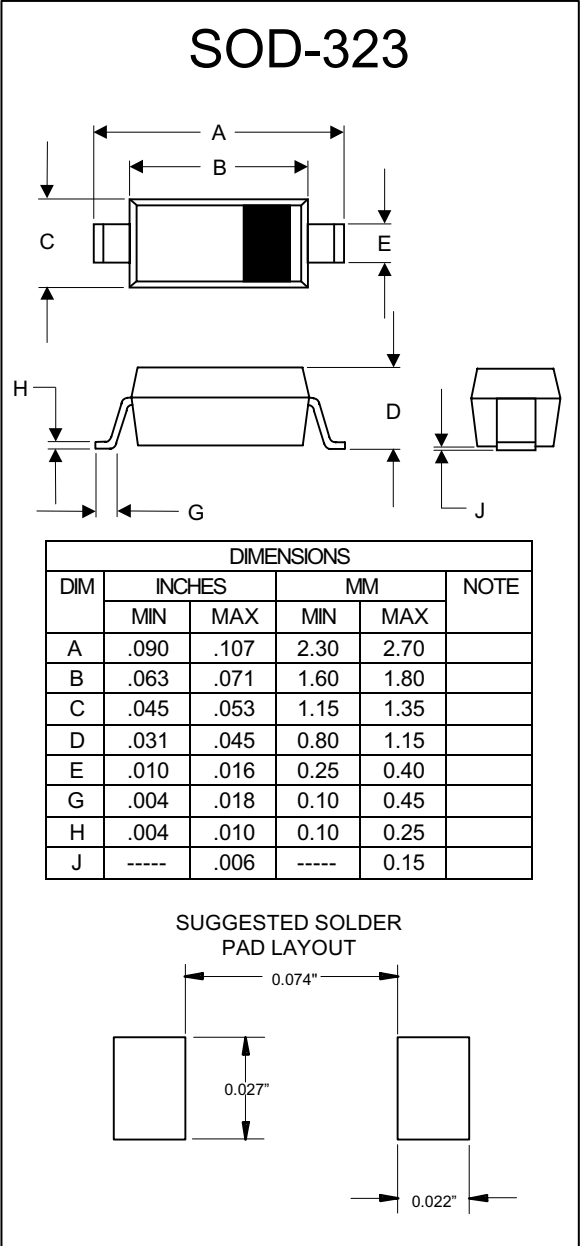
| Characteristic | Symbol | SD101AWS | SD101BWS | SD101CWS |
|---|--------------|---------------|----------|----------|
| Peak Repetitive Reverse Voltage | V_{RRM} | | | |
| Working Peak Reverse Voltage | V_{RWM} | 60V | 50V | 40V |
| DC Blocking Voltage | V_R | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 42V | 35V | 28V |
| Maximum single cycle surge 10us square wave | I_{FSM} | 2.0A | | |
| Power Dissipation(Note 1) | P_d | 400mW | | |
| Thermal Resistance, Junction to Ambient | R | 650°C/W | | |
| Operating Junction Temp. Range | T_j | -55 to +125°C | | |
| Storage Temp. Range | T_{STG} | -55 to +150°C | | |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Characteristic | Symbol | Max | Test Condition |
|------------------------------|----------|--|-------------------------------------|
| Leakage Current | I_R | 200nA | $V_R=50V$ $V_R=40V$ $V_R=30V$ |
| Maximum Forward Voltage Drop | V_F | 0.41V 0.4V .39V 1V 0.95V 0.9V | $I_F=1mA$ $I_F=15mA$ |
| Junction Cap. | C_j | 2.0pF 2.1pF 2.2pF | $V_R=0V, f=1.0MHz$ |
| Reverse Recovery Time | t_{rr} | 1ns | $I_F=I_R=5mA, recover to 0.1I_R$ |

Note: 1

Valid provided that electrodes are kept at ambient temperature



SD101AWS thru SD101CWS

Figure 1. Typical variation of forward current vs. fwd. Voltage

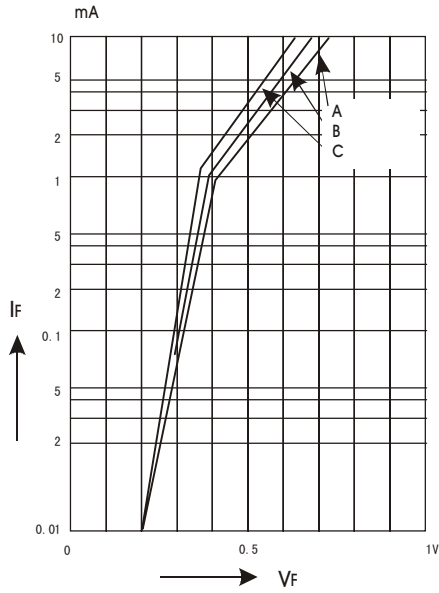


Figure 2. Typical forward conduction curve

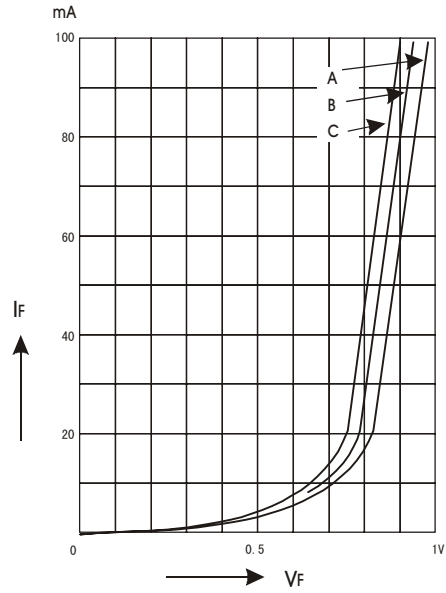


Figure 3. Typical variation of reverse current at versus temperature

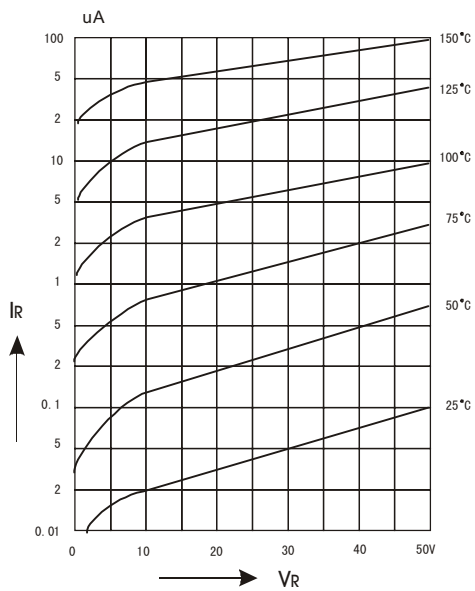
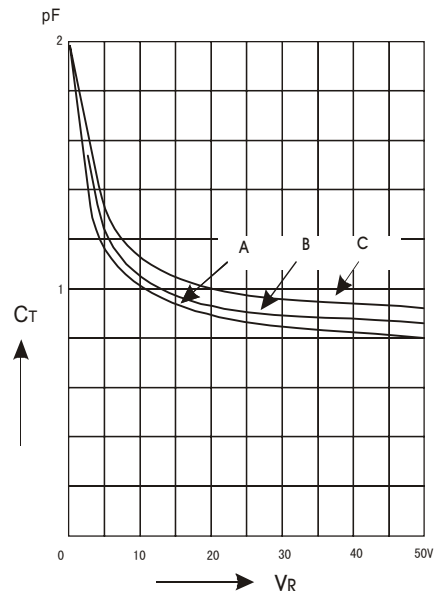


Figure 4. Typical capacitance curve as a function of reverse voltage



Ordering Information

| Device | Packing |
|------------------|----------------------|
| (Part Number)-TP | Tape&Reel;3Kpcs/Reel |

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