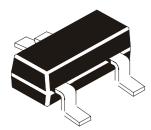


SILICON EPITAXIAL GENERAL SWITCHING DIODE

CMBD99 SOT-23

MARKING: C7



| <u> </u> | | Pin Configuration | | | |
|----------|--|--|--|--|--|
| | | 1 = ANODE 2 = CATHODE 3 = ANODE/ | | | |
| 10 | | CATHODE | | | |

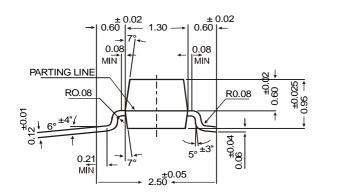
Silicon Epitaxial General Switching Double Diode Series.

ABSOLUTE MAXIMUM RATINGS (per diode)

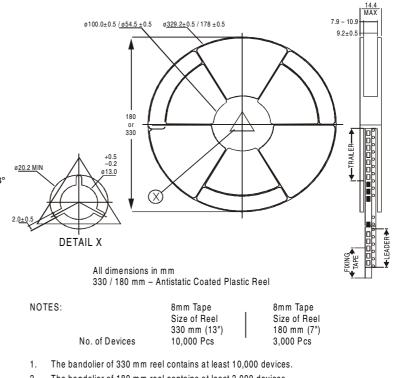
| DESCRIPTION | SYMBOL | | VALUE | | | UNIT | | | | |
|---|------------------|----------------|-------|-------|-------|------|--|--|--|--|
| Repetitive Peak Reverse Voltage | VRM | | 35 | | | V | | | | |
| Continuous Reverse Voltage | VR | | 30 | | | V | | | | |
| Non- Repetitive Peak Forward Current t=1us | IFSM | | 4.0 | | | А | | | | |
| Peak Forward Current | IFM | | 300 | | | mA | | | | |
| Average Forward Current | IO | | 100 | | | mA | | | | |
| Power Dissipation Ta=25 deg C | PT | | 150 | | | mW | | | | |
| Junction Temperature | Тј 125 | | | deg C | | | | | | |
| Storage Temperature | Tstg -55 to +125 | | | 5 | deg C | | | | | |
| ELECTRICAL CHARACTERISTICS (per diode) (Ta=25 deg C Unless otherwise noted) | | | | | | | | | | |
| DESCRIPTION | SYMBOL | TEST CONDITION | MIN | TYP | MAX | UNIT | | | | |
| Reverse Voltage Leakage Current | IR | VR=30V | - | - | 100 | nA | | | | |
| Forward Voltage | VF | IF=10mA | - | - | 1.0 | V | | | | |
| | | IF=50mA | - | - | 1.2 | V | | | | |
| | | IF=100mA | - | - | 1.4 | V | | | | |
| Diode Capacitance | CD | VR=0V, f=1MHz | - | - | 4.0 | pF | | | | |

SOT-23 Formed SMD Package

±0.05 2.50 — ± 0.02 ±0.02 0.60 ±0.025 1.30— 1 89. Q 0.02 ±0.025 . 64.1 В q 2.90 6.1 3 cl 2 3°"

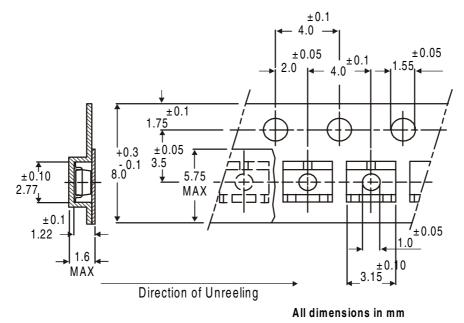


SOT-23 Package Reel Information Reel specifications for W" Packing (13" reel)



- 2. The bandolier of 180 mm reel contains at least 3,000 devices.
- 3. No more than 0.5% missing devices / reel. 50 empty compartments for 330 mm reel. 15 empty compartments for 180 mm reel.
- 4. Three consecutive empty places might be found provided this gap is followed by 6 consecutive devices.
- The carrier tape (leader) starts with at least 75 empty positions (equivalent to 330 5. mm). In order to fix the carrier tape a self adhesive tape of 20 to 50 mm is applied. At the end of the bandolier at least 40 empty positions (equivalent to 160 mm) are there.

Tape Specification for SOT-23 Surface Mount Device



Packing Detail

| PACKAGE | STANDARD PACK | | INNER CARTON BOX | | OUTER CARTON BOX | | |
|------------|---------------|----------------|----------------------------------|----------------|--------------------------------------|------------------|------------------|
| | Details | Net Weight/Qty | Size | Qty | Size | Qty | Gr Wt |
| SOT-23 T&R | 3K/reel | 136 gm/3K pcs | 3" x 7.5" x 7.5" 9" x 9" x 9" | 12.0K 51.0K | 17" x 15" x 13.5" 19" x 19" x 19" | 192.0K 408.0K | 12 kgs 28 kgs |
| | 10K/reel | 415 gm/10K pcs | 13" x 13" x 0.5" | 10.0K | 17" x 15" x 13.5" | 300.0K | 16 kgs |

Customer Notes

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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Data Sheet