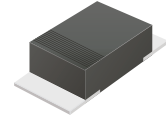


CDBMT220L-G Thru. CDBMT240L-G

Reverse Voltage: 20 to 40 Volts

Forward Current: 2.0 Amp

RoHS Device

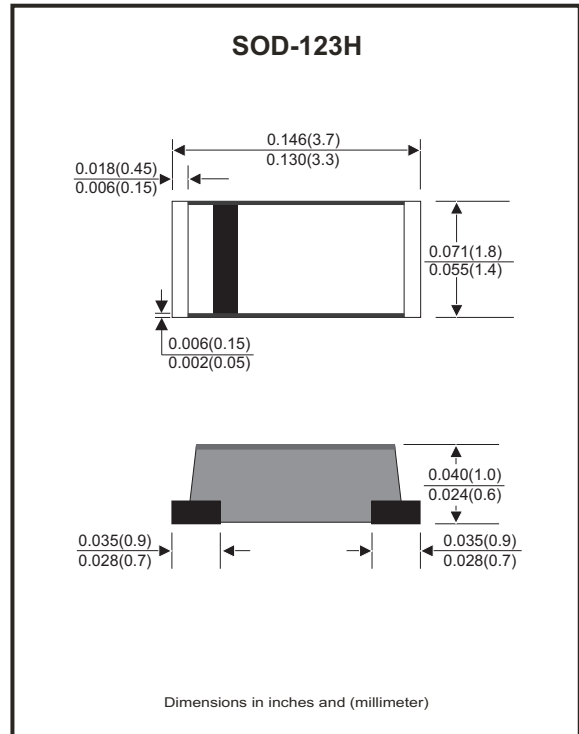


Features

- Excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guarding for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Lead-free part meets environmental standards of MIL-STD-19500/228

Mechanical data

- Case: Mini SMA/SOD-123H , molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Approx. weight: 0.011 grams



Maximum Ratings and Electrical Characteristics (at T_A=25°C unless otherwise noted)

| Parameter | Symbol | CDBMT220L-G | CDBMT230L-G | CDBMT240L-G | Units |
|---|------------------|-------------|-------------|-------------|-------|
| Max. Repetitive Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | V |
| Continuous Reverse Voltage | V _R | 20 | 30 | 40 | V |
| Max. RMS Voltage | V _{RMS} | 14 | 21 | 28 | V |
| Max. Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I _{FSM} | 50 | | | A |
| Max. Forward Rectified Current (Fig.2) | I _o | 2.0 | | | A |
| Max. Forward Voltage @I _F =2.0A | V _F | 0.38 | 0.40 | 0.40 | V |
| Max. Reverse Current @T _A =25°C | I _R | 1.0 | | | mA |
| Typ. Thermal Resistance Junction to Ambient | R _{θJA} | 70 | | | °C/W |
| Typ. Diode Junction Capacitance f=1MHz and applied 4V DC reverse voltage | C _J | 160 | | | pF |
| Storage Temperature | T _{STG} | -65 to +175 | | | °C |
| Operating Temperature | T _J | -55 to +100 | | | °C |

Company reserves the right to improve product design , functions and reliability without notice.

RATING AND CHARACTERISTIC CURVES (CDBMT220L-G thru CDBMT240L-G)

Fig.1 - Typical Forward Characteristics

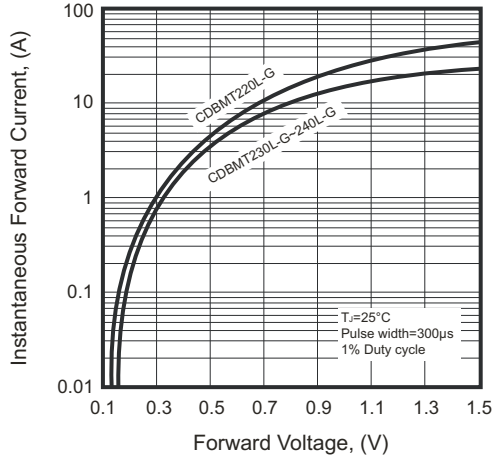


Fig.2 - Typical Forward Current Derating Curve

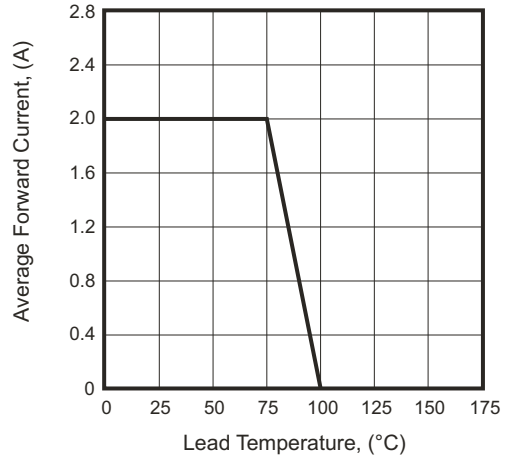


Fig.3 - Typical Reverse Characteristics

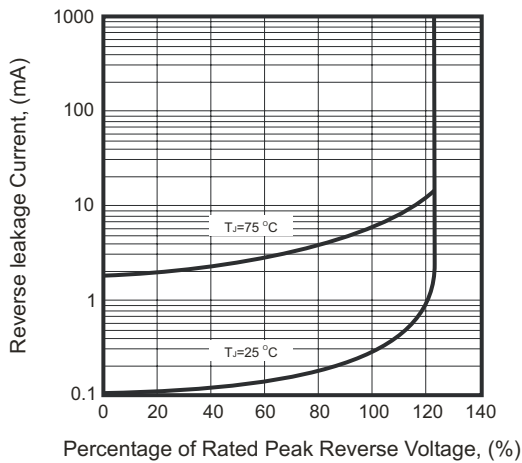


Fig.4 - Maximum Non-repetitive Forward Surge Current

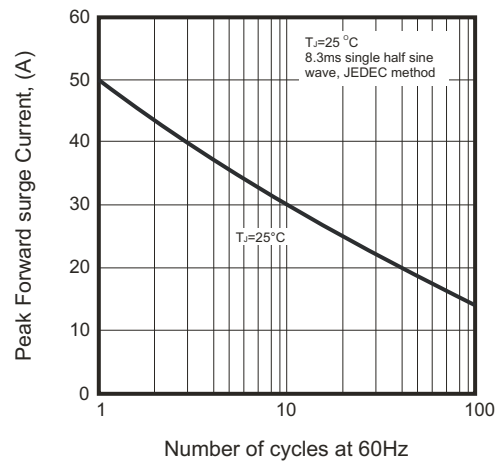
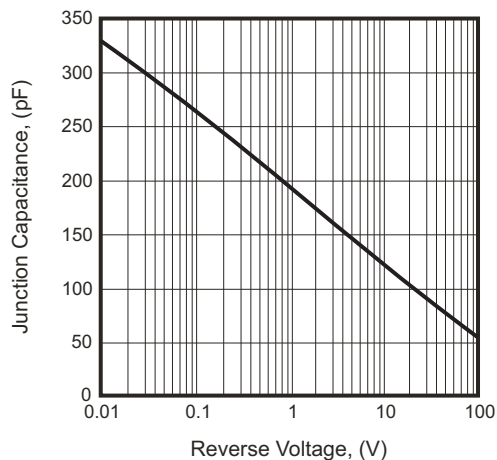
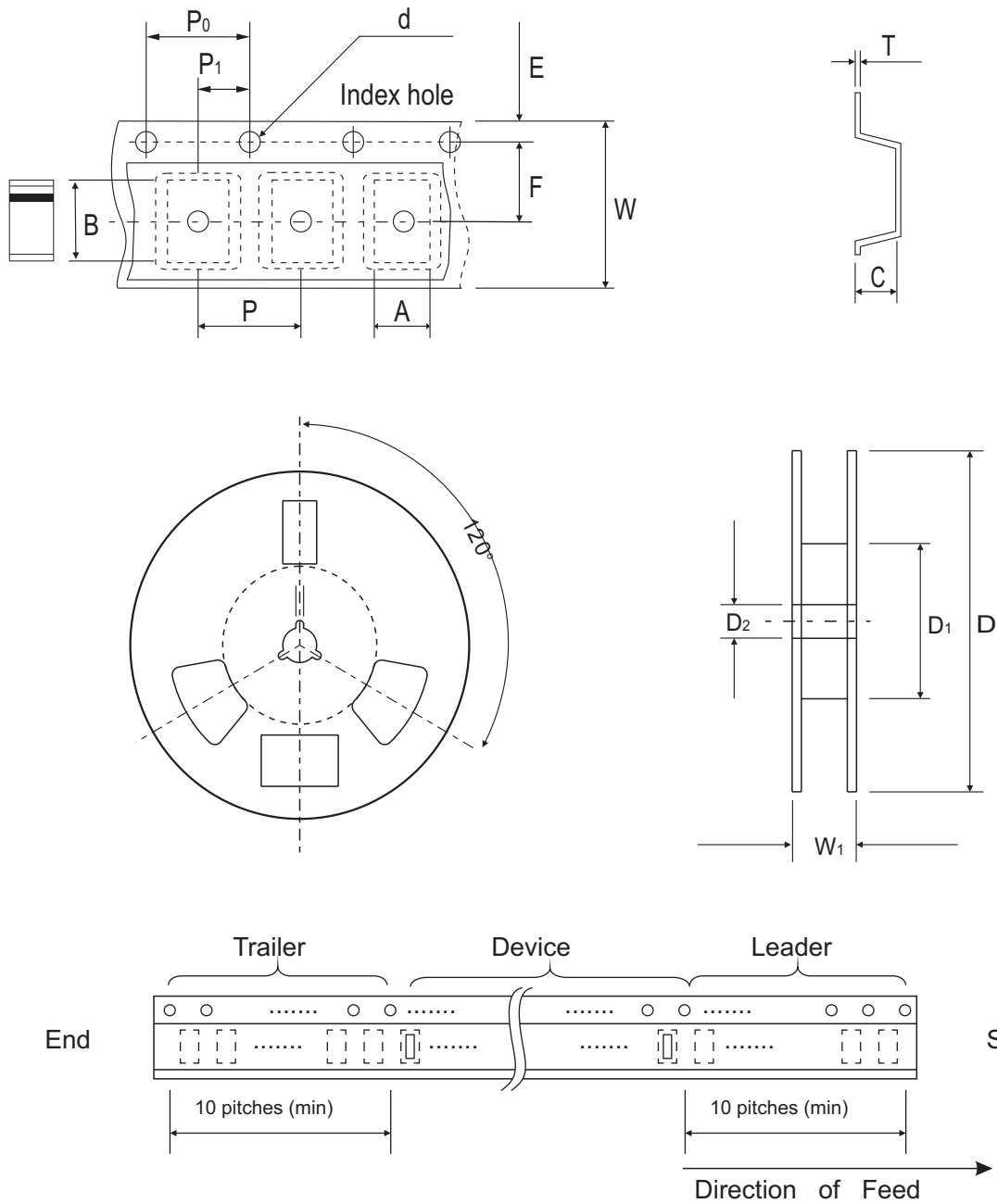


Fig.5 - Typical Junction Capacitance



Reel Taping Specification



| SOD-123H | SYMBOL | A | B | C | d | D | D1 | D2 |
|----------|--------|---------------|---------------|---------------|---------------|---------------|-------------|---------------|
| | (mm) | 2.00 ± 0.10 | 3.85 ± 0.10 | 1.10 ± 0.10 | 1.50 ± 0.10 | 178.00 ± 2.00 | 62.00 (min) | 13.00 ± 0.50 |
| | (inch) | 0.079 ± 0.004 | 0.152 ± 0.004 | 0.043 ± 0.004 | 0.059 ± 0.004 | 7.007 ± 0.079 | 2.441 (min) | 0.512 ± 0.020 |

| SOD-123H | SYMBOL | E | F | P | P0 | P1 | T | W | W1 |
|----------|--------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|
| | (mm) | 1.75 ± 0.10 | 3.50 ± 0.10 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.10 | 0.23 ± 0.10 | 8.00 ± 0.30 | 11.40 ± 1.00 |
| | (inch) | 0.069 ± 0.004 | 0.138 ± 0.004 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.004 | 0.009 ± 0.04 | 0.315 ± 0.012 | 0.449 ± 0.039 |

Marking Code

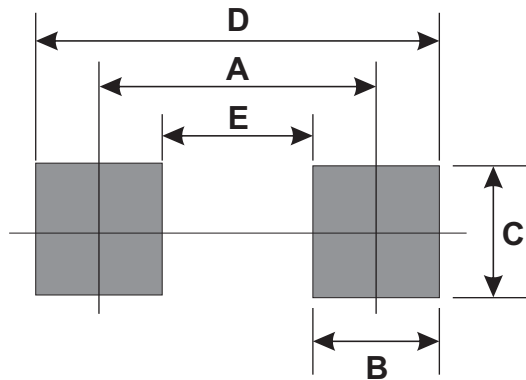
| Part Number | Marking Code |
|-------------|--------------|
| CDBMT220L-G | L22 |
| CDBMT230L-G | L23 |
| CDBMT240L-G | L24 |



XXX= Product type marking code

Suggested PAD Layout

| SIZE | SOD-123H | |
|------|----------|--------|
| | (mm) | (inch) |
| A | 3.00 | 0.118 |
| B | 1.30 | 0.051 |
| C | 1.80 | 0.071 |
| D | 4.30 | 0.169 |
| E | 1.70 | 0.067 |



Standard Packaging

| Case Type | REEL PACK | |
|-----------|--------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| SOD-123H | 3,000 | 7 |