

CDBM220L-HF Thru. CDBM240L-HF

Reverse Voltage: 20 to 40 Volts

Forward Current: 2.0 Amp

RoHS Device

Halogen free

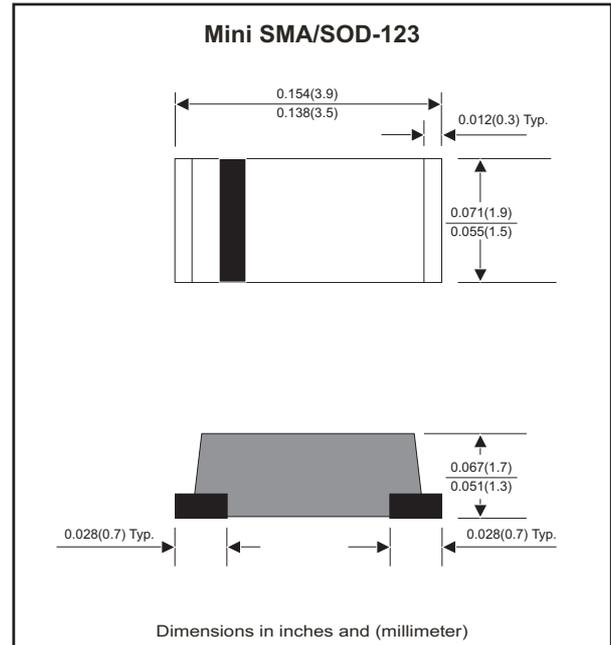


Features

- Ideal for surface mount applications.
- Easy pick and place.
- Plastic package has Underwriters Lab. flammability classification 94V-0.
- Exceeds environmental standard MIL-S-19500/228.
- Low leakage current.

Mechanical data

- Case: Mini SMA/SOD-123, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Approx. weight: 0.018 grams



Maximum Ratings and Electrical Characteristics

| Parameter | Symbol | CDBM220L-HF | CDBM230L-HF | CDBM240L-HF | Units |
|--|---------------------------------|-------------|-------------|-------------|--------------|
| 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 |
| Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I_{FSM} | 50 | | | A |
| Forward rectified current | I_o | 2.0 | | | A |
| Max. forward voltage at $I_F=2.0A$ | V_F | 0.38 | 0.40 | 0.38 | V |
| Reverse current | $V_R=V_{RRM}$ $T_A=25^\circ C$ | 1.0 | | | mA |
| | $V_R=V_{RRM}$ $T_A=125^\circ C$ | 10 | | | |
| Max. thermal resistance, junction to ambient | $R_{\theta JA}$ | 70 | | | $^\circ C/W$ |
| Diode junction capacitance | C_J | 160 | | | pF |
| Storage temperature | T_{STG} | -65 to +175 | | | $^\circ C$ |
| Operating temperature | T_J | -55 to +125 | | | $^\circ C$ |

RATING AND CHARACTERISTIC CURVES (CDBM220L-HF thru CDBM240L-HF)

Fig.1 - Typical Forward Characteristics

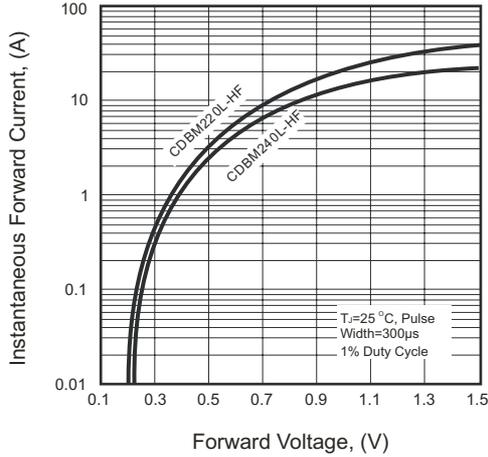


Fig.2 - Typical Forward Current Derating Curve

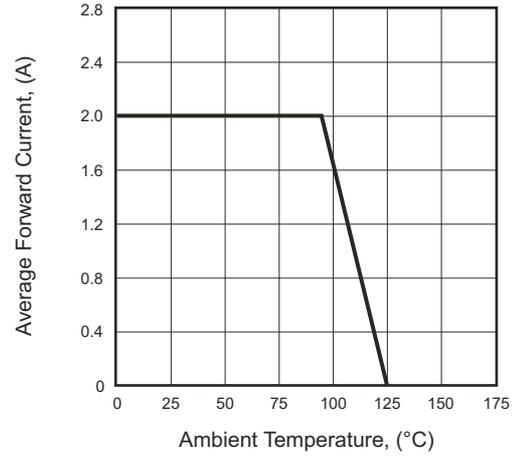


Fig.3 - Typical Reverse Characteristics

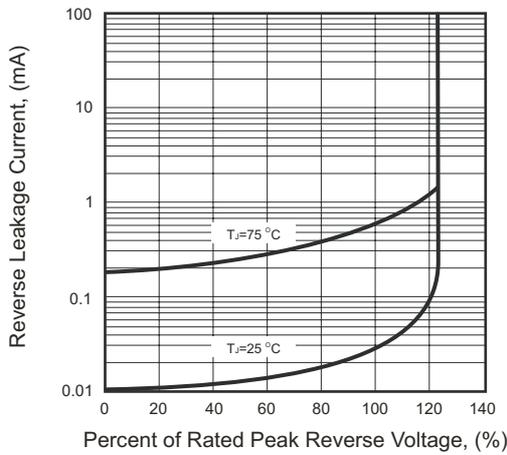


Fig.4 - Max. Non-repetitive Forward Surge Current

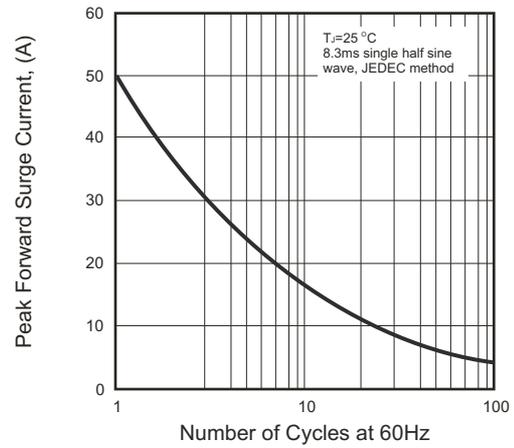
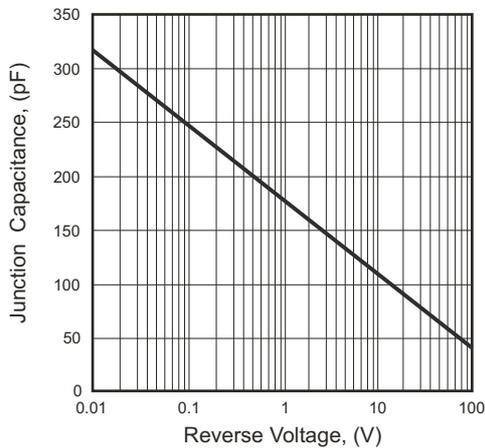
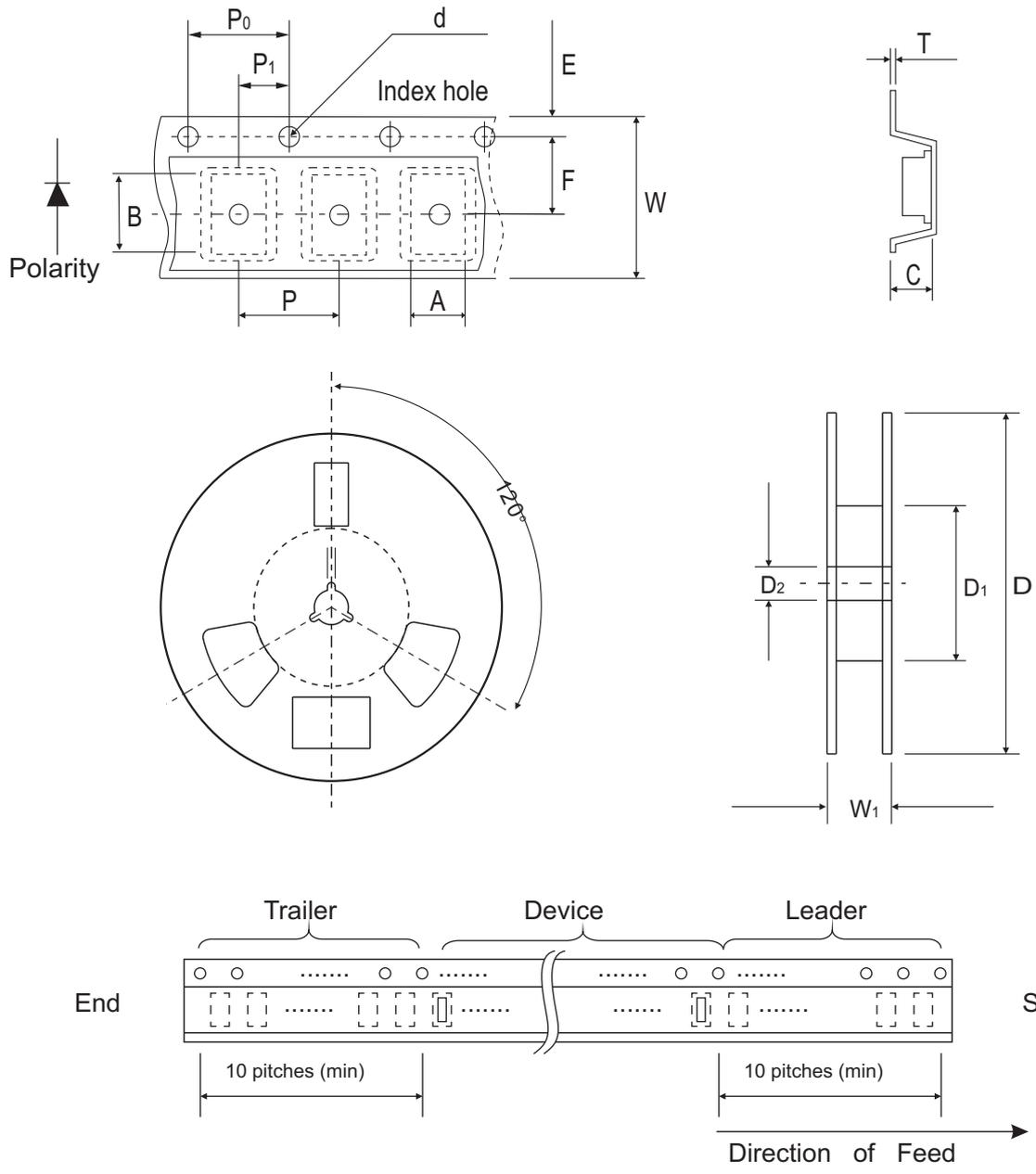


Fig.5 - Typical Junction Capacitance



Reel Taping Specification



| | SYMBOL | A | B | C | d | D | D1 | D2 |
|------------------|--------|--------------|--------------|--------------|---------------|--------------|------------|---------------|
| Mini-SMA/SOD-123 | (mm) | 1.90 ± 0.10 | 3.90 ± 0.10 | 1.68 ± 0.10 | 1.50 ± 0.10 | 178 ± 2.00 | 62.0 MIN. | 13.0 ± 0.50 |
| | (inch) | 0.075 ± 0.04 | 0.153 ± 0.04 | 0.066 ± 0.04 | 0.059 ± 0.004 | 7.00 ± 0.079 | 2.440 MIN. | 0.512 ± 0.020 |

| | SYMBOL | E | F | P | P0 | P1 | W | W1 |
|------------------|--------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Mini-SMA/SOD-123 | (mm) | 1.75 ± 0.10 | 3.50 ± 0.10 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.10 | 8.00 ± 0.30 | 11.4 ± 1.0 |
| | (inch) | 0.689 ± 0.004 | 0.138 ± 0.004 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.004 | 0.315 ± 0.011 | 0.449 ± 0.039 |

Marking Code

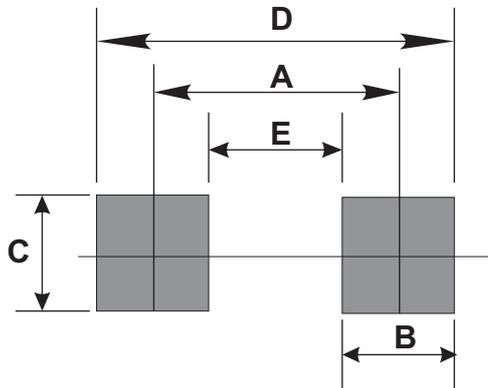
| Part Number | Marking Code |
|-------------|--------------|
| CDBM220L-HF | L22 |
| CDBM230L-HF | L23 |
| CDBM240L-HF | L24 |



xxx = Product type marking code

Suggested PAD Layout

| SIZE | Mini-SMA/SOD-123 | |
|------|------------------|--------|
| | (mm) | (inch) |
| A | 3.30 | 0.130 |
| B | 1.40 | 0.055 |
| C | 1.90 | 0.075 |
| D | 4.70 | 0.185 |
| E | 1.90 | 0.075 |



Standard Packaging

| Case Type | REEL PACK | |
|------------------|--------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| Mini-SMA/SOD-123 | 2,500 | 7 |