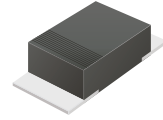


## CDBM220L-G Thru. CDBM240L-G

Reverse Voltage: 20 to 40 Volts

Forward Current: 2.0 Amp

RoHS Device

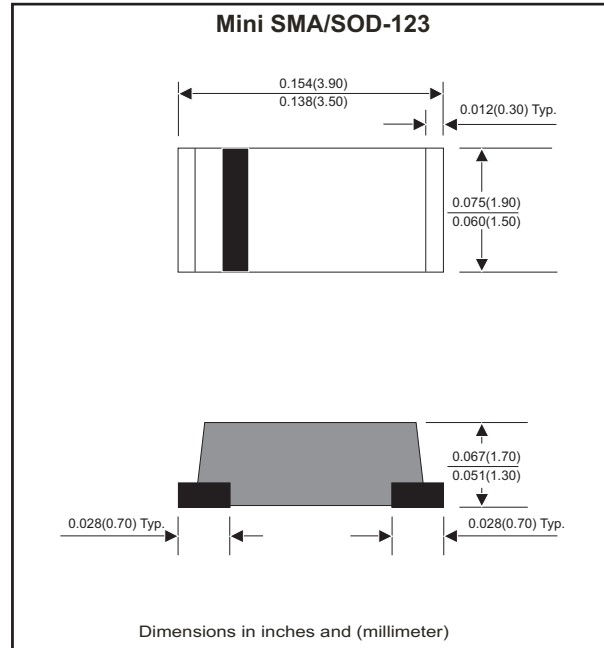


### Features

- 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: 0.04 grams



### Maximum Ratings and Electrical Characteristics

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

## RATING AND CHARACTERISTIC CURVES (CDBM220L-G thru CDBM240L-G)

Fig.1 Typical Forward Characteristics

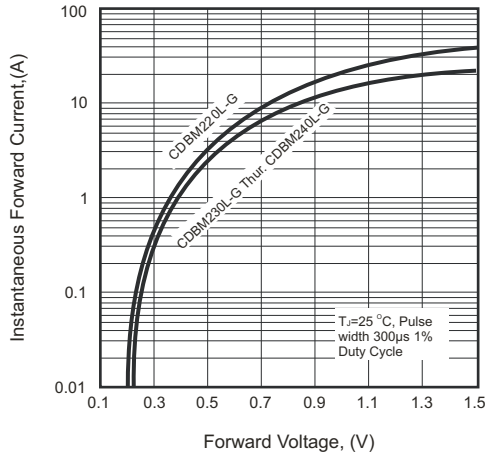


Fig.2 Typical Forward Current Derating Curve

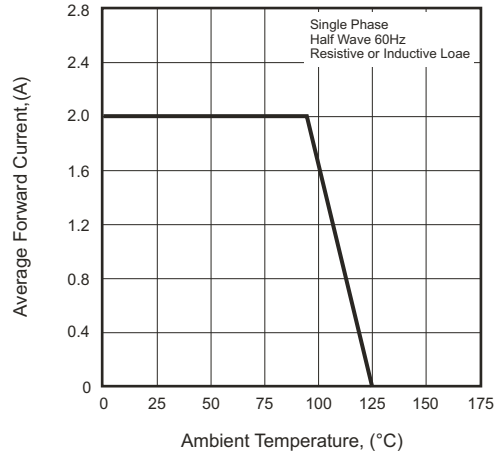


Fig.3- Typical Reverse Characteristics

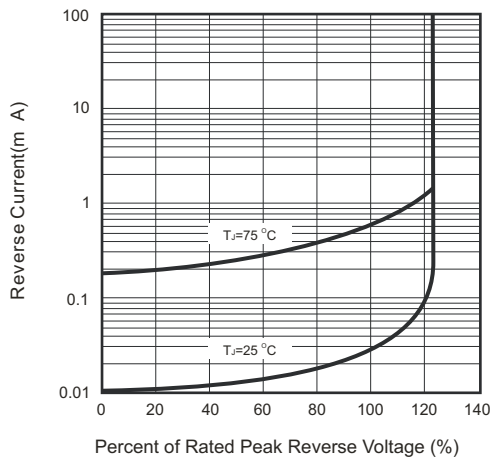


Fig.4- Max. Non-repetitive Forward Surge Current

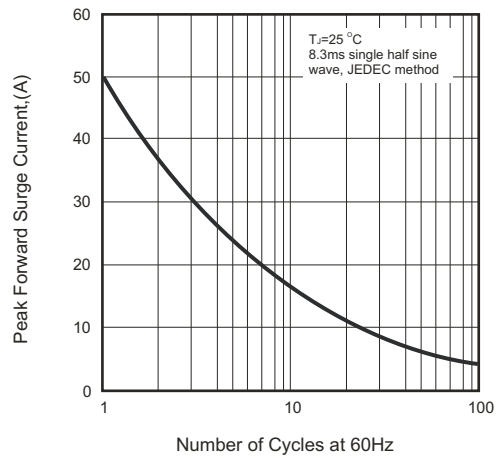
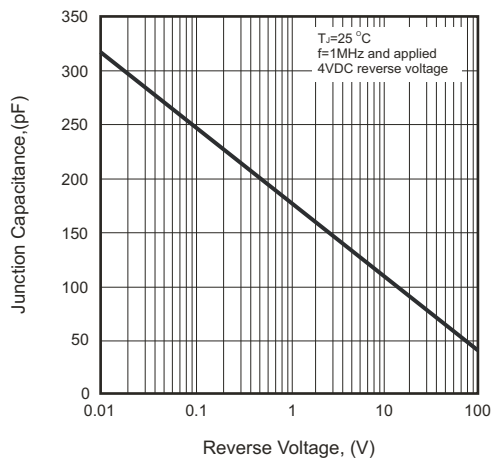
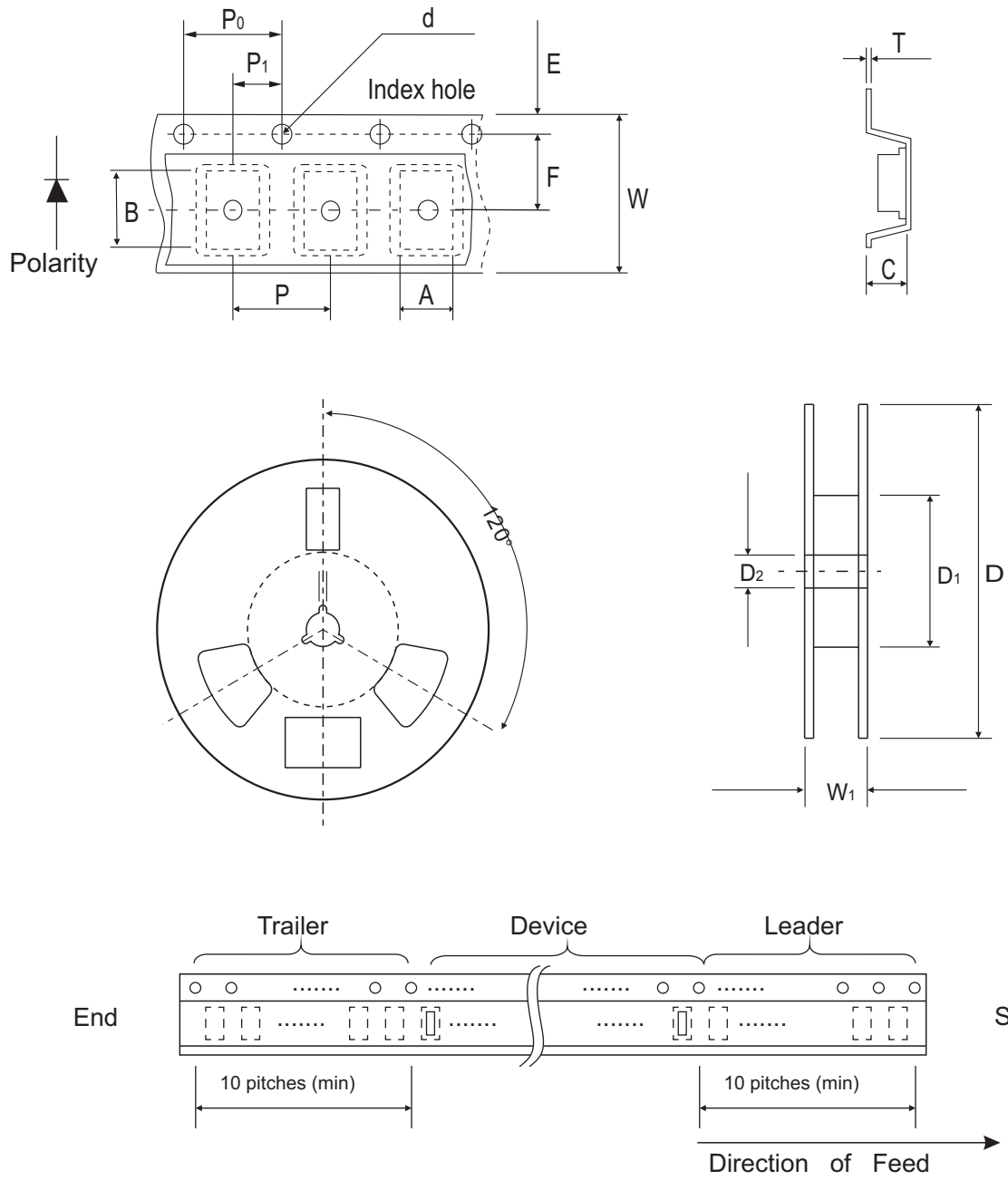


Fig.5- Typical Junction Capacitance



## Reel Taping Specification



| Mini-SMA/SOD-123 | SYMBOL | A            | B            | C            | d             | D            | D1         | D2            |
|------------------|--------|--------------|--------------|--------------|---------------|--------------|------------|---------------|
|                  | (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 | 0.154 ± 0.04 | 0.066 ± 0.04 | 0.059 ± 0.004 | 7.00 ± 0.079 | 2.440 MIN. | 0.512 ± 0.020 |

| Mini-SMA/SOD-123 | 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 ± 1.0   |
|                  | (inch) | 0.069 ± 0.004 | 0.138 ± 0.004 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.004 | 0.009 ± 0.004 | 0.315 ± 0.012 | 0.449 ± 0.004 |

## Marking Code

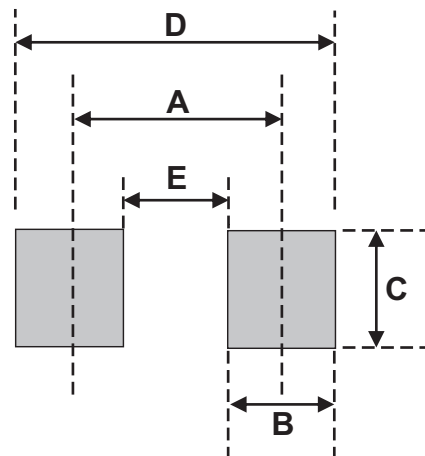
| Part Number | Marking Code |
|-------------|--------------|
| CDBM220L-G  | L22          |
| CDBM230L-G  | L23          |
| CDBM240L-G  | L24          |



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<br>( pcs ) | Reel Size<br>(inch) |
| Mini-SMA/SOD-123 | 2,500           | 7                   |