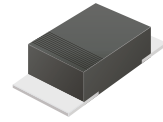


## CDBM220L-G Thru. CDBM240L-G

Reverse Voltage: 20 to 40 Volts

Forward Current: 2.0 Amp

RoHS Device

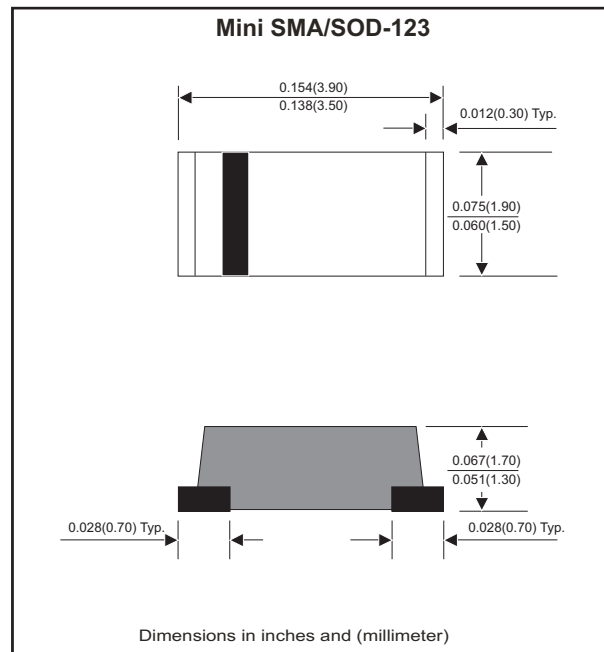


### Features

- 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 <sub>RRM</sub> | 20          | 30         | 40         | V     |
| Continuous reverse voltage                                                                       | V <sub>R</sub>   | 20          | 30         | 40         | V     |
| Max. RMS voltage                                                                                 | V <sub>RMS</sub> | 14          | 21         | 28         | V     |
| Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I <sub>FSM</sub> | 50          |            |            | A     |
| Max. average forward current                                                                     | I <sub>O</sub>   | 2.0         |            |            | A     |
| Max. instantaneous forward voltage at 2.0A                                                       | V <sub>F</sub>   | 0.38        | 0.40       |            | V     |
| Max. DC reverse current at T <sub>A</sub> =25°C<br>V <sub>RRM</sub> T <sub>A</sub> =125°C        | I <sub>R</sub>   | 1.0<br>10   |            |            | mA    |
| Max. thermal resistance, junction to ambient                                                     | R <sub>θJA</sub> | 70          |            |            | °C/W  |
| Diode junction capacitance                                                                       | C <sub>J</sub>   | 160         |            |            | pF    |
| Storage temperature                                                                              | T <sub>STG</sub> | -65 to +175 |            |            | °C    |
| Operating temperature                                                                            | T <sub>J</sub>   | -55 to +125 |            |            | °C    |

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

Fig.1 Typical Forward Characteristics

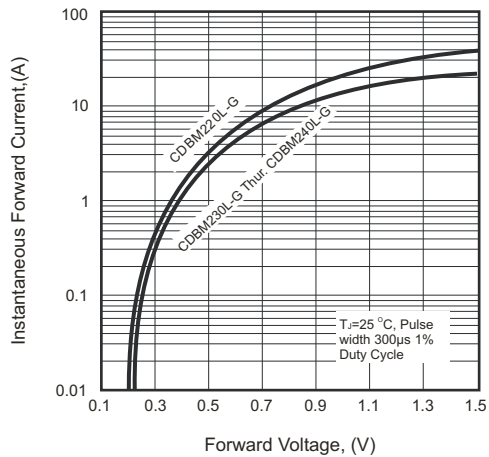


Fig.2 Typical Forward Current Derating Curve

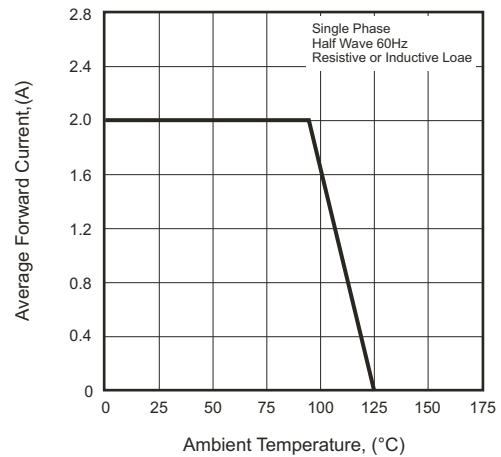


Fig.3- Typical Reverse Characteristics

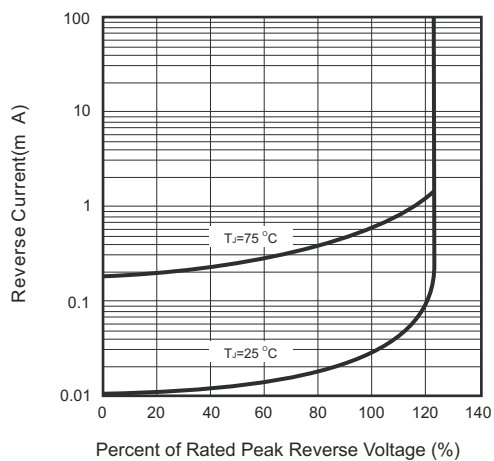


Fig.4- Max. Non-repetitive Forward Surge Current

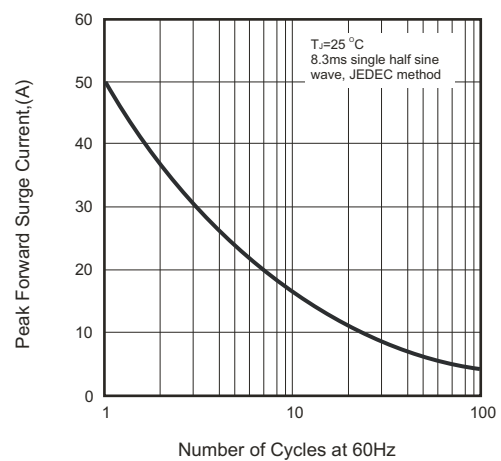
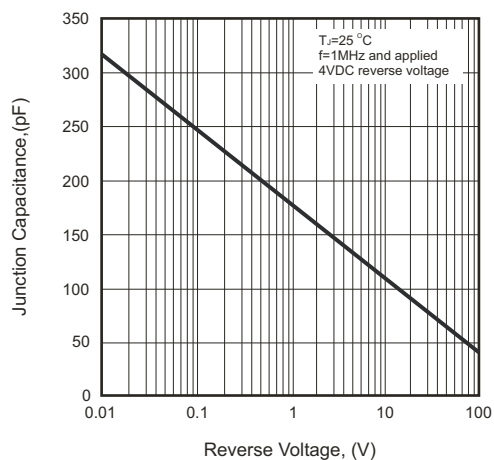
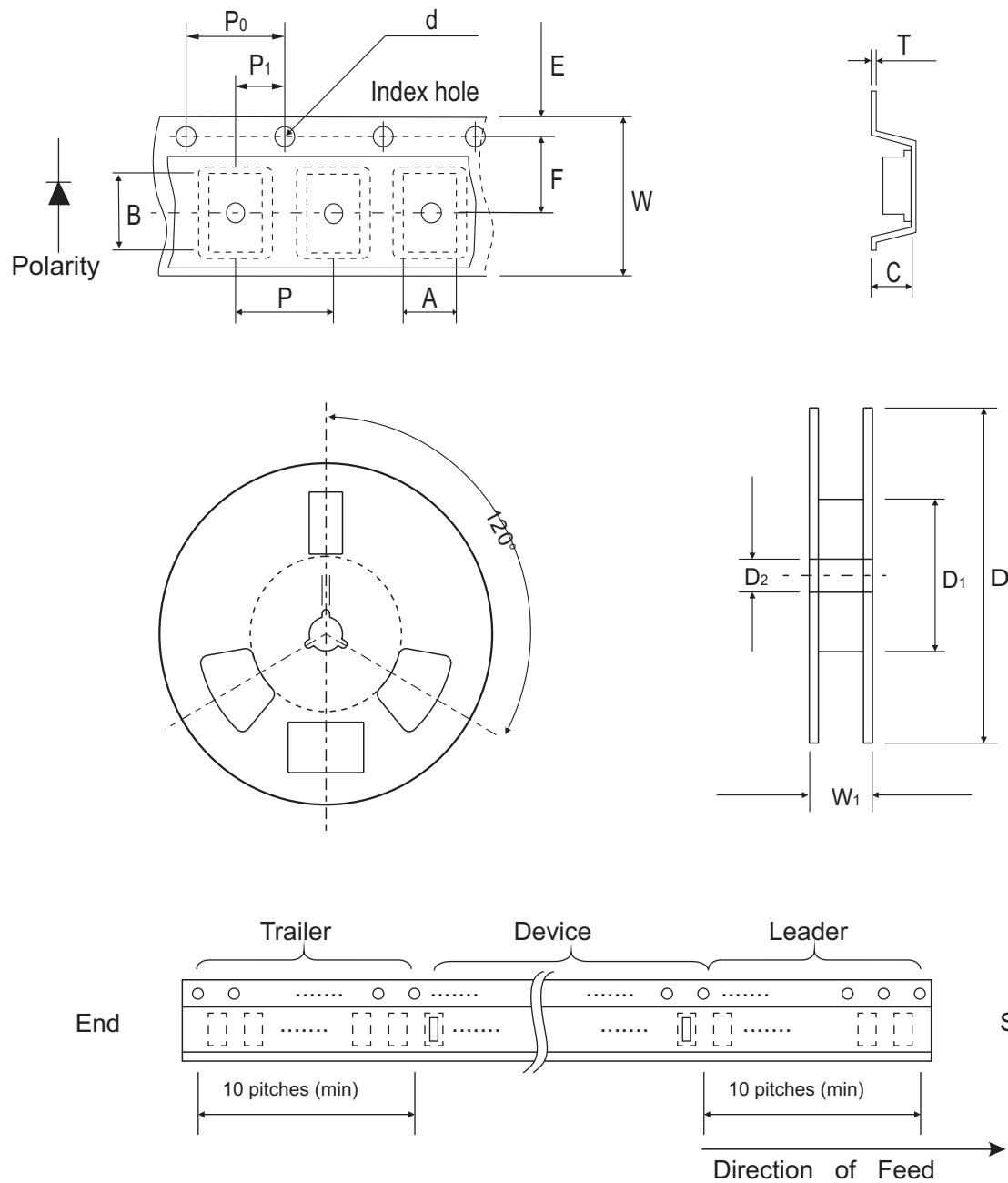


Fig.5- Typical Junction Capacitance



## Reel Taping Specification



| Mini-SMA/SOD-123 | SYMBOL | A                | B                | C                | d                 | D                | D1         | D2                |
|------------------|--------|------------------|------------------|------------------|-------------------|------------------|------------|-------------------|
|                  | (mm)   | $1.90 \pm 0.10$  | $3.90 \pm 0.10$  | $1.68 \pm 0.10$  | $1.50 \pm 0.10$   | $178 \pm 2.00$   | 62.0 MIN.  | $13.0 \pm 0.50$   |
|                  | (inch) | $0.075 \pm 0.04$ | $0.154 \pm 0.04$ | $0.066 \pm 0.04$ | $0.059 \pm 0.004$ | $7.00 \pm 0.079$ | 2.440 MIN. | $0.512 \pm 0.020$ |

| Mini-SMA/SOD-123 | SYMBOL | E                 | F                 | P                 | P0                | P1                | T                 | W                 | W1                |
|------------------|--------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                  | (mm)   | $1.75 \pm 0.10$   | $3.50 \pm 0.10$   | $4.00 \pm 0.10$   | $4.00 \pm 0.10$   | $2.00 \pm 0.10$   | $0.23 \pm 0.10$   | $8.00 \pm 0.30$   | $11.40 \pm 1.0$   |
|                  | (inch) | $0.069 \pm 0.004$ | $0.138 \pm 0.004$ | $0.157 \pm 0.004$ | $0.157 \pm 0.004$ | $0.079 \pm 0.004$ | $0.009 \pm 0.004$ | $0.315 \pm 0.012$ | $0.449 \pm 0.004$ |

## Marking Code

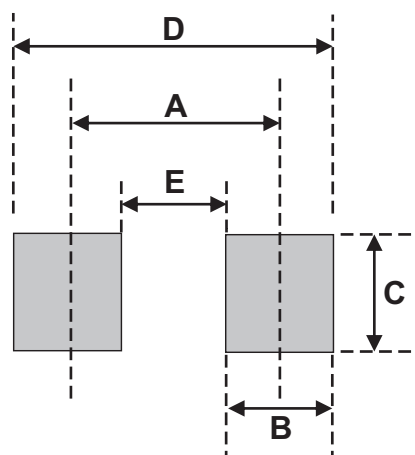
| Part Number | Marking Code |
|-------------|--------------|
| CDBM220L-G  | L22          |
| CDBM230L-G  | L23          |
| CDBM240L-G  | L24          |



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                   |

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Comchip Technology:](#)

[CDBM240L-G](#)