



## CDB0230QRM

200mA 30V

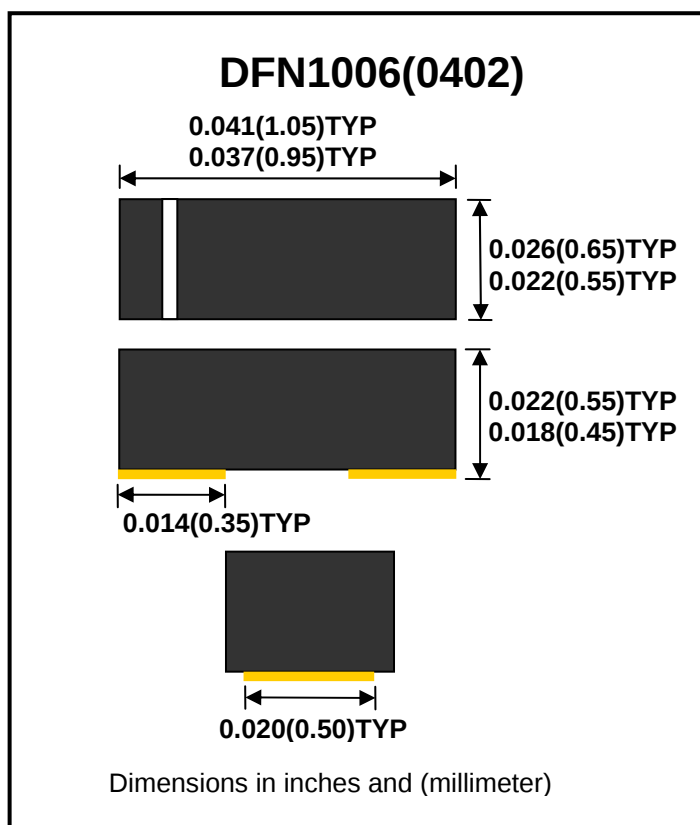


## Features

- Low reverse current.
- Designed for mounting on small surface.
- Extremely thin / leadless package.
- Majority carrier conduction.

## MECHANICAL CHARACTERISTICS

- Case: DFN1006(0402) mold package
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Marking code: cathode band & BB
- Mounting position: Any.
- Weight: 0.001 gram(approx.)



## Maxim Rating And ELECTRICAL CHARACTERISTICS (at TA=25°C unless otherwise noted)

| Parameter                       | Condition                                                           | Symbol    | Min | Typ | Max  | Unit |
|---------------------------------|---------------------------------------------------------------------|-----------|-----|-----|------|------|
| Repetitive peak reverse voltage |                                                                     | $V_{RRM}$ |     |     | 35   | V    |
| Reverse voltage                 |                                                                     | $V_R$     |     |     | 30   | V    |
| Average forward current         |                                                                     | $I_o$     |     |     | 200  | mA   |
| Forward current surge peak      | 8.3ms single half sine-wave superimposed on rate load(JEDEC method) | $I_{FSM}$ |     |     | 1    | A    |
| Power Dissipation               |                                                                     | $P_D$     |     |     | 125  | mW   |
| Storage/Operation temperature   |                                                                     | $T_{Sgt}$ | -40 |     | +125 | °C   |
| Junction temperature            |                                                                     | $T_j$     |     |     | +125 | °C   |
| Forward voltage                 | $I_F=200mA$                                                         | $V_F$     |     |     | 0.6  | V    |
| Reverse current                 | $V_R=10V$                                                           | $I_R$     |     |     | 1    | uA   |



## Typical Characteristics

Fig.1-Forward characteristics

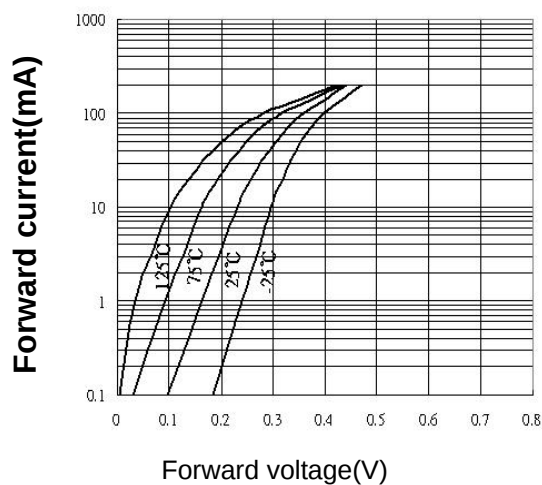


Fig.2-Reverse characteristics

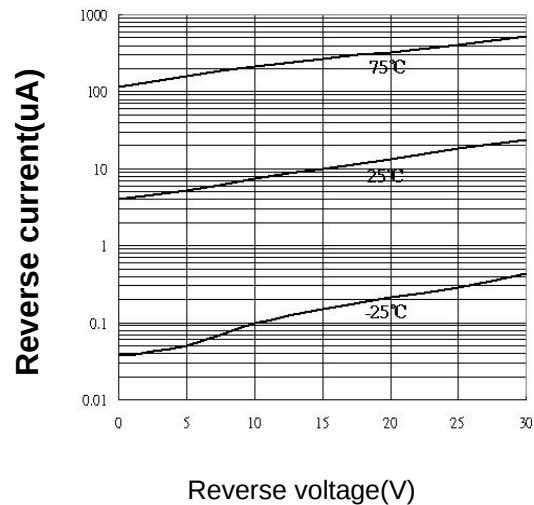


Fig. 3 - Capacitance between terminals characteristics

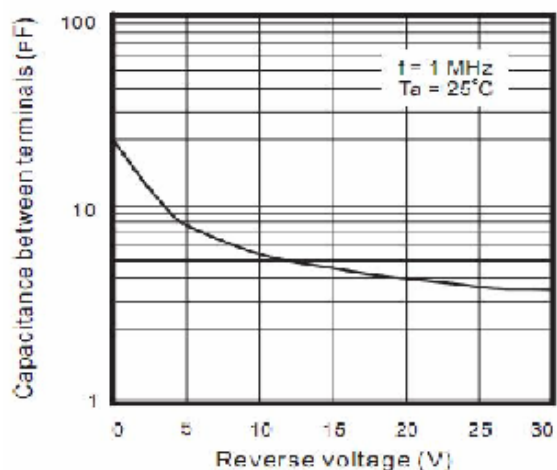


Fig.4 - Current derating curve

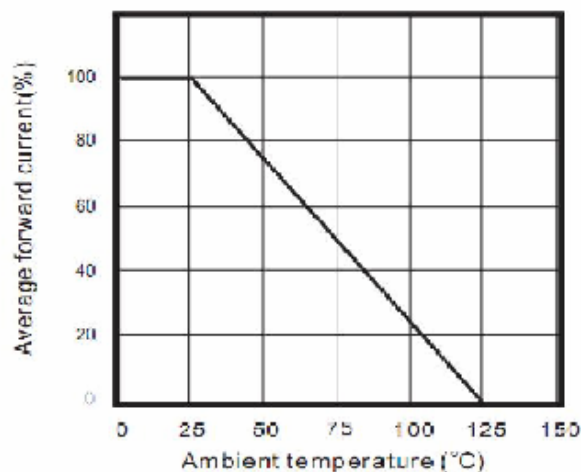


Fig. 5 - VF Dispersion map

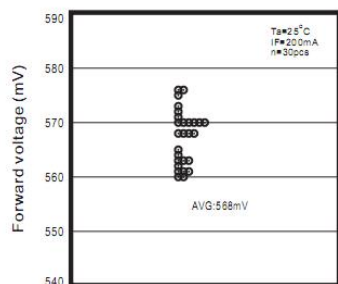


Fig. 6 - IR Dispersion map

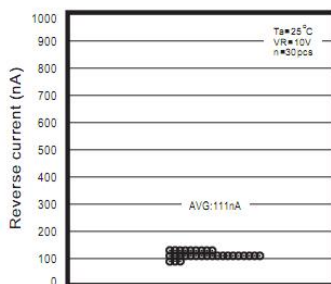
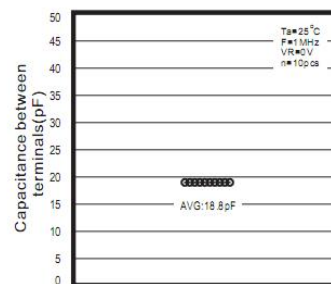
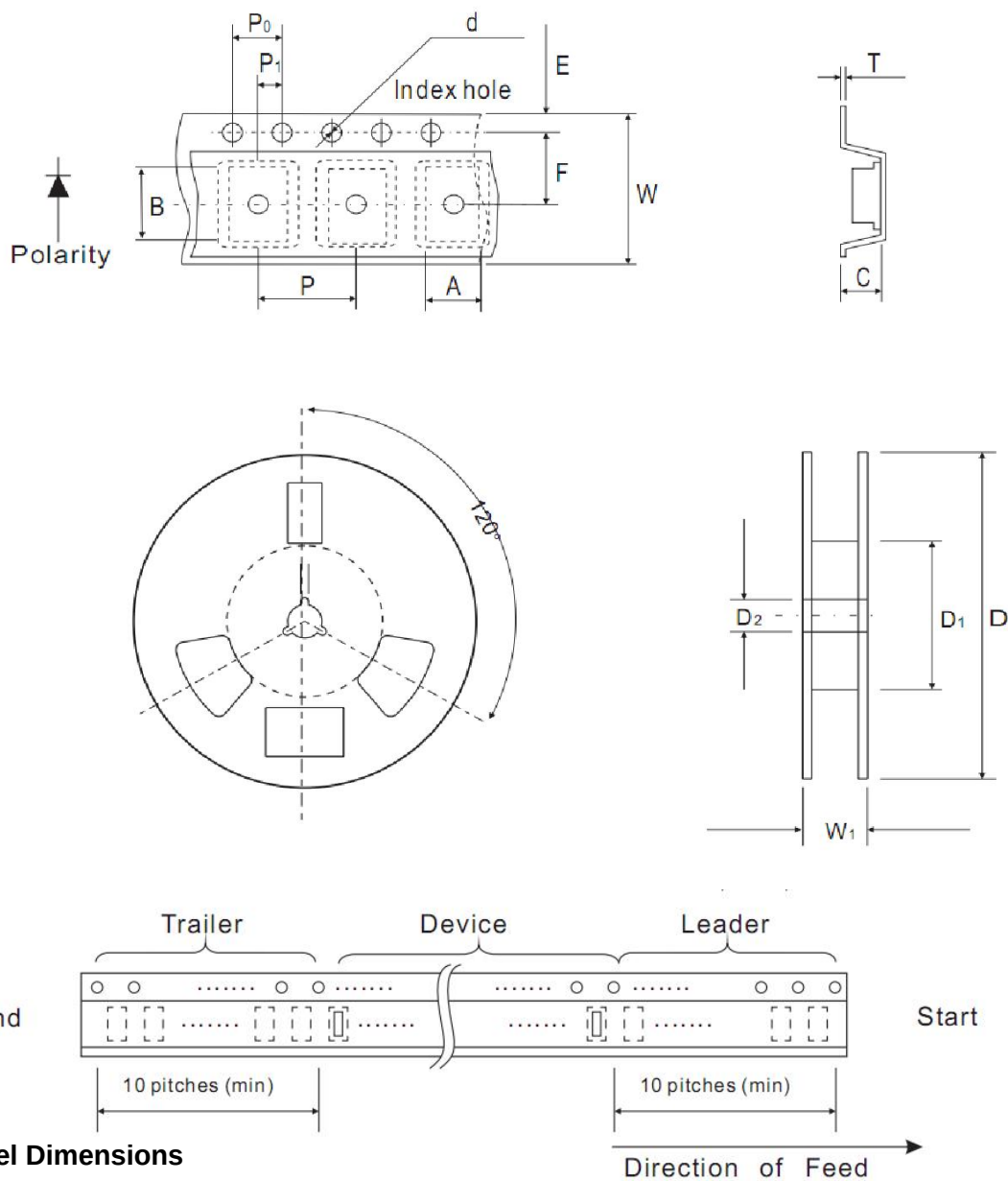


Fig. 7 - CT Dispersion map





## Packing Specification



Tape &amp; Reel Dimensions

| Package | Unit | A           | B           | C           | d           | D          | D1       | D2          |
|---------|------|-------------|-------------|-------------|-------------|------------|----------|-------------|
| DFN1006 | mm   | 0.67±0.10   | 1.12±0.10   | 0.60±0.10   | 1.50±0.10   | 178±1      | 60MIN    | 13.0±0.20   |
|         | inch | 0.026±0.004 | 0.044±0.004 | 0.024±0.004 | 0.060±0.004 | 7.008±0.04 | 2.362MIN | 0.512±0.008 |

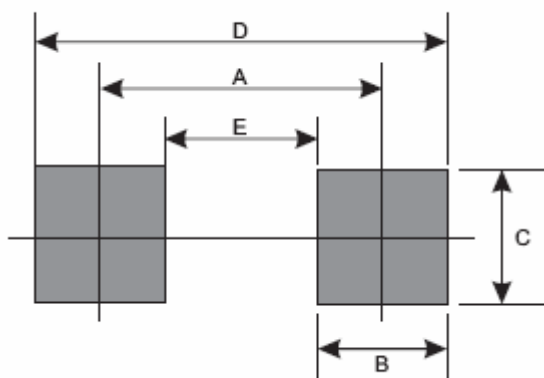
| package | Unit | E           | F           | P           | P0          | P1          | T           | W           | W1       |
|---------|------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------|
| DFN1006 | mm   | 1.75±0.10   | 3.5±0.10    | 4.0±0.10    | 4.0±0.10    | 2.0±0.10    | 0.22±0.03   | 8.0±0.10    | 13.5MAX  |
|         | inch | 0.069±0.004 | 0.138±0.004 | 0.157±0.004 | 0.157±0.004 | 0.079±0.004 | 0.009±0.002 | 0.315±0.004 | 0.531MAX |



## Standard Package

| Package | Reel Size | Qty/Reel |
|---------|-----------|----------|
| DFN1006 | 7"        | 5000 pcs |

## RECOMMENDED SOLDERING FOOTPRINT



## Reflow Soldering

| Product Size | Dimension/ mm |        |        |        |        |
|--------------|---------------|--------|--------|--------|--------|
|              | A             | B      | C      | D      | E      |
| DFN1006      | 0.750         | 0.500  | 0.700  | 1.250  | 0.250  |
|              | 0.030"        | 0.020" | 0.028" | 0.049" | 0.010" |

## Marking Code

| Part Number | Marking Code |
|-------------|--------------|
| CDB0230QRM  | BB           |



## DISCLAIMERS

These products are not designed for use in applications where any failure or malfunction may result in personal injury, death or severe property or environmental damage such as medical, military, aircraft, space or life support equipments.