

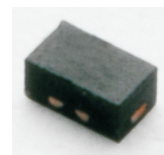
## CDBZ0130R-HF

$I_o = 100 \text{ mA}$

$V_R = 30 \text{ Volts}$

RoHS Device

Halogen Free



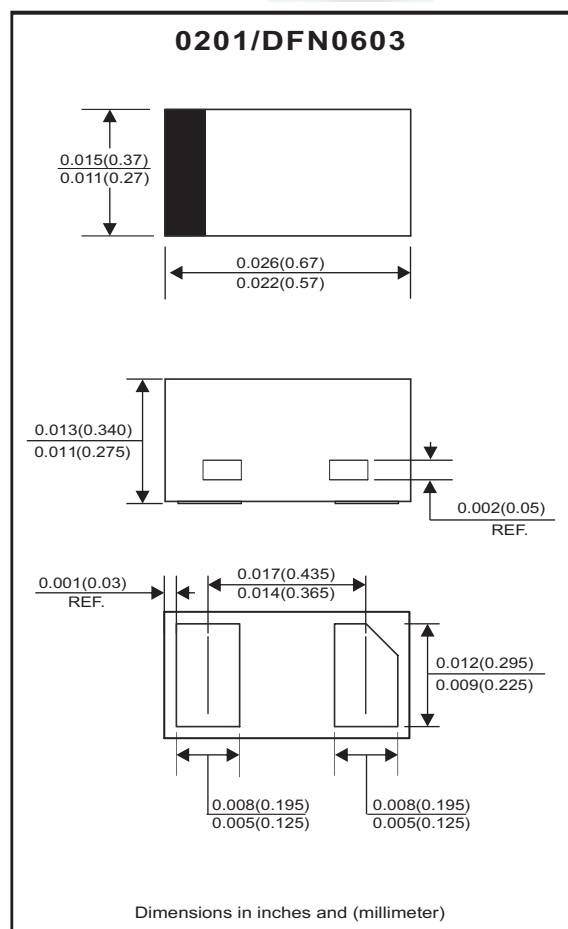
### Features

- Low reverse current.
- Low forward voltage.
- Ultra small mold type.

### Mechanical data

- Case: 0201/DFN0603 package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Mounting position: Any
- Weight: 0.0004 grams(approx.).

### Circuit diagram



### Maximum Rating (at $T_A=25^\circ\text{C}$ unless otherwise noted)

| Parameter                                   | Conditions                                                              | Symbol    | Min | Typ | Max  | Unit             |
|---------------------------------------------|-------------------------------------------------------------------------|-----------|-----|-----|------|------------------|
| Reverse voltage                             |                                                                         | $V_R$     |     |     | 30   | V                |
| Average rectified forward current           |                                                                         | $I_o$     |     |     | 100  | mA               |
| Forward current,surge peak<br>(60Hz*1cycle) | 8.3 ms single half sine-wave superimposed<br>on rate load(JEDEC method) | $I_{FSM}$ |     |     | 500  | mA               |
| Operating temperature range                 |                                                                         | $T_J$     | -40 |     | +150 | $^\circ\text{C}$ |
| Storage temperature range                   |                                                                         | $T_{STG}$ | -40 |     | +150 | $^\circ\text{C}$ |

### Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

| Parameter       | Conditions            | Symbol | Min | Typ | Max  | Unit          |
|-----------------|-----------------------|--------|-----|-----|------|---------------|
| Forward voltage | $I_F = 10 \text{ mA}$ | $V_F$  |     |     | 0.46 | V             |
| Reverse current | $V_R = 10 \text{ V}$  | $I_R$  |     |     | 0.30 | $\mu\text{A}$ |

## RATING AND CHARACTERISTIC CURVES ( CDBZ0130R-HF )

Fig.1 - Forward Characteristics

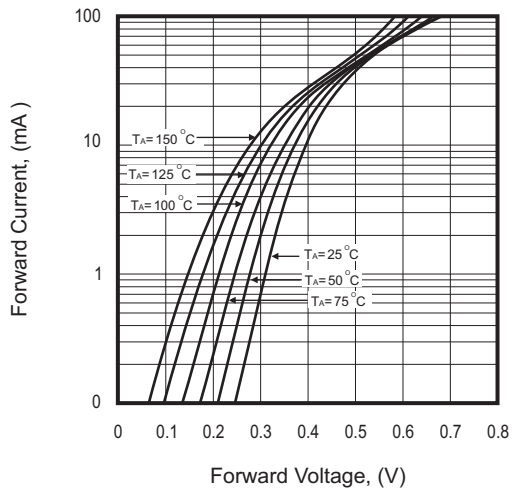


Fig.2 - Reverse Characteristics

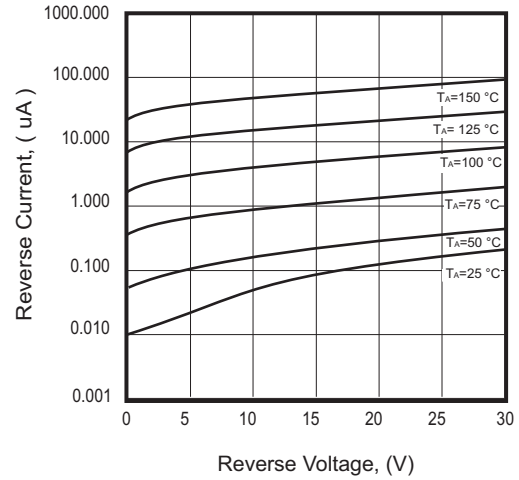


Fig.3 - Capacitance Between Terminals Characteristics

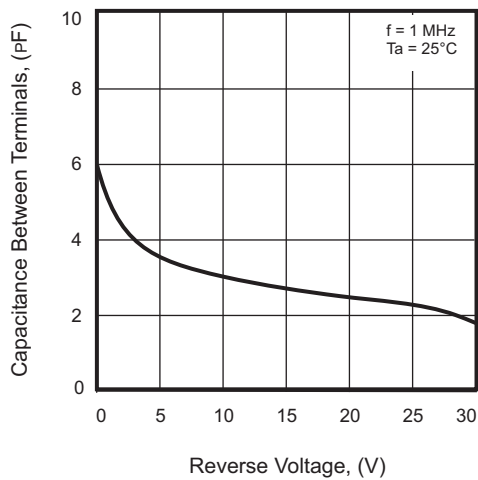
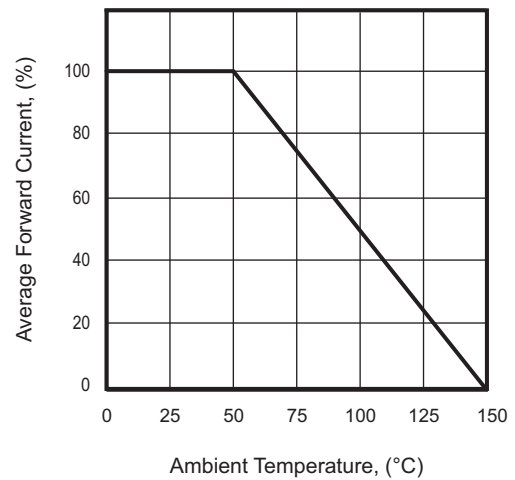
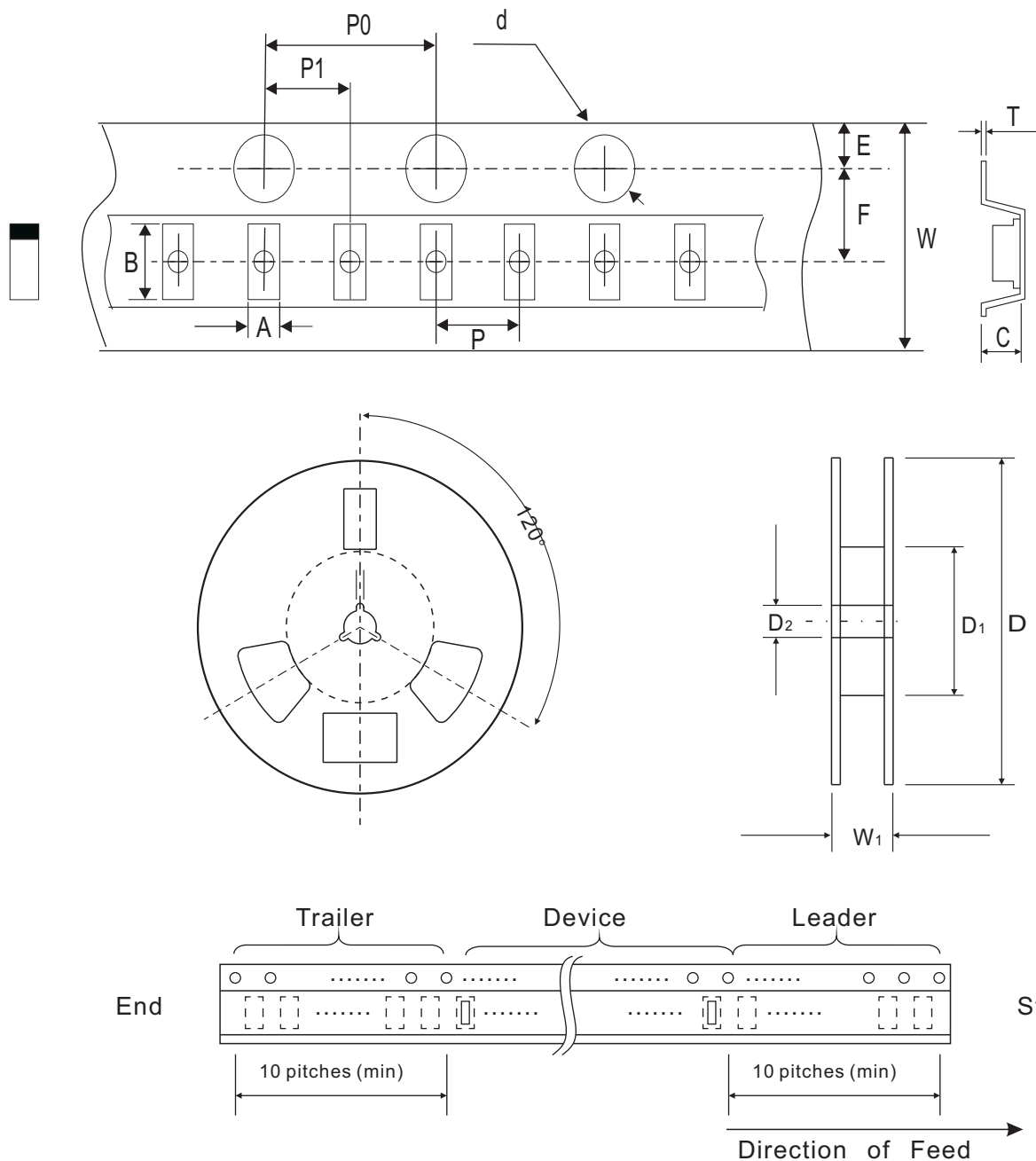


Fig.4 - Current Derating Curve



## Reel Taping Specification



| 0201<br>(DFN0603) | SYMBOL | A                  | B             | C             | d             | D             | D <sub>1</sub> | D <sub>2</sub> |
|-------------------|--------|--------------------|---------------|---------------|---------------|---------------|----------------|----------------|
|                   | (mm)   | 0.39 +0.03/-0.02   | 0.72 ± 0.03   | 0.36 ± 0.03   | 1.50 + 0.10   | 178 ± 1.00    | 54.4 ± 0.40    | 13.0 ± 0.20    |
|                   | (inch) | 0.015 +0.001/0.001 | 0.028 ± 0.001 | 0.014 ± 0.001 | 0.059 + 0.004 | 7.008 ± 0.039 | 2.142 ± 0.016  | 0.512 ± 0.008  |

| 0201<br>(DFN0603) | SYMBOL | E             | F             | P             | P <sub>0</sub> | P <sub>1</sub> | T             | W             | W <sub>1</sub> |
|-------------------|--------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
|                   | (mm)   | 1.75 ± 0.10   | 3.50 ± 0.05   | 2.00 ± 0.05   | 4.00 ± 0.05    | 2.00 ± 0.05    | 0.23 ± 0.05   | 8.00 ± 0.10   | 12.30 ± 0.10   |
|                   | (inch) | 0.069 ± 0.004 | 0.138 ± 0.002 | 0.079 ± 0.004 | 0.157 ± 0.004  | 0.079 ± 0.004  | 0.009 ± 0.002 | 0.315 ± 0.008 | 0.484 ± 0.004  |

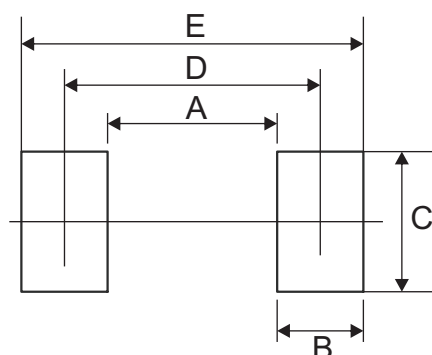
## Marking Code

| Part Number  | Marking Code |
|--------------|--------------|
| CDBZ0130R-HF | A            |



## Suggested PAD Layout

| SIZE | 0201(DFN0603) |        |
|------|---------------|--------|
|      | (mm)          | (inch) |
| A    | 0.16          | 0.006  |
| B    | 0.24          | 0.009  |
| C    | 0.34          | 0.013  |
| D    | 0.40          | 0.016  |
| E    | 0.64          | 0.025  |



## Standard Packaging

| Case Type     | Qty Per Reel | Reel Size |
|---------------|--------------|-----------|
|               | (Pcs)        | (inch)    |
| 0201(DFN0603) | 10,000       | 7         |

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