

## ACDBZC0130L-HF

$I_o = 100 \text{ mA}$

$V_R = 30 \text{ V}$

RoHS Device

Halogen Free



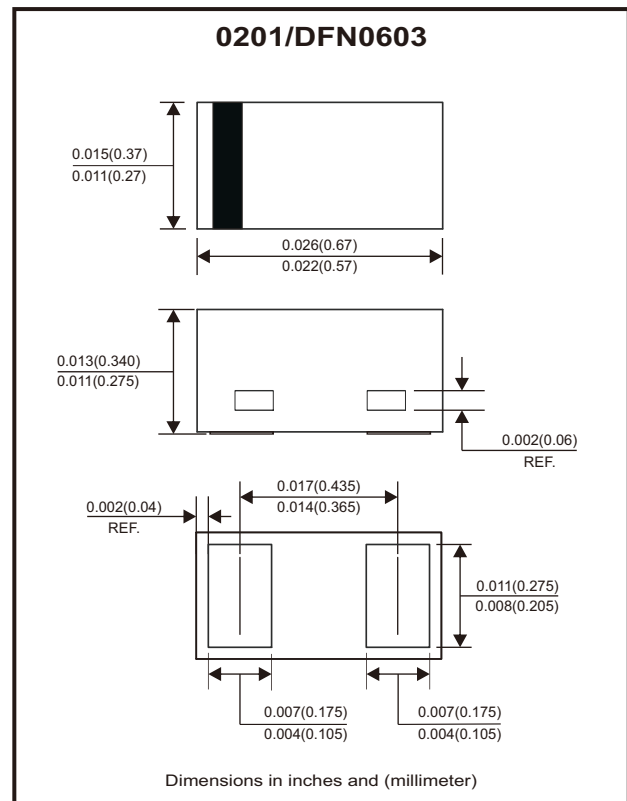
### Features

- Low forward voltage.
- Ultra small mold type.
- AEC-Q101 Qualified.

### 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 (60Hz * 1cycle) | 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | $I_{FSM}$ |     |     | 500  | mA               |
| Junction temperature                        |                                                                      | $T_J$     | -40 |     | -125 | $^\circ\text{C}$ |
| Storage temperature                         |                                                                      | $T_{STG}$ | -40 |     | -125 | $^\circ\text{C}$ |

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

| Parameter       | Conditions          | Symbol | Min | Typ | Max  | Unit          |
|-----------------|---------------------|--------|-----|-----|------|---------------|
| Forward voltage | $I_F = 10\text{mA}$ | $V_F$  |     |     | 0.37 | V             |
| Reverse current | $V_R = 10\text{V}$  | $I_R$  |     |     | 7    | $\mu\text{A}$ |

Rating and Characteristic Curves (ACDBZC0130L-HF)

Fig.1 - Forward Characteristics

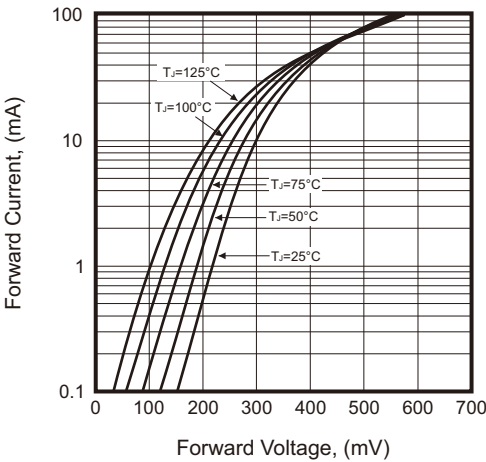


Fig.2 - Reverse Characteristics

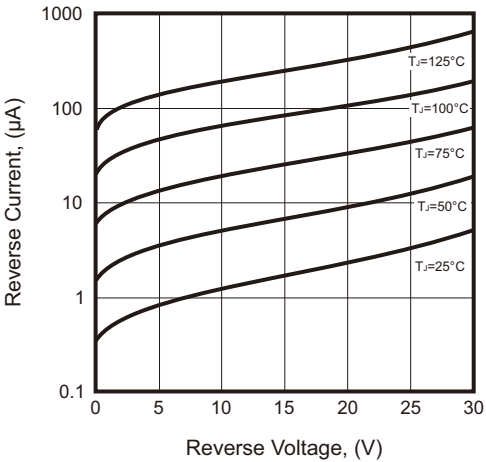


Fig.3 - Capacitance Between Terminals Characteristics

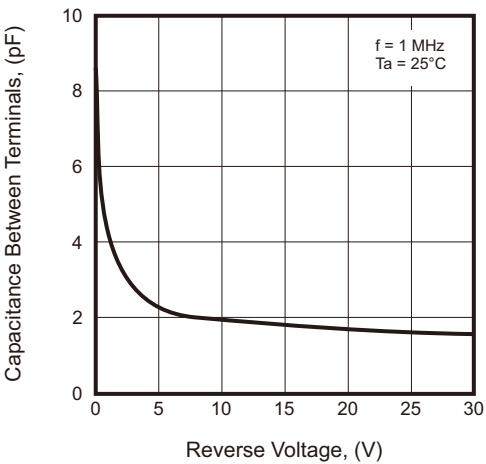
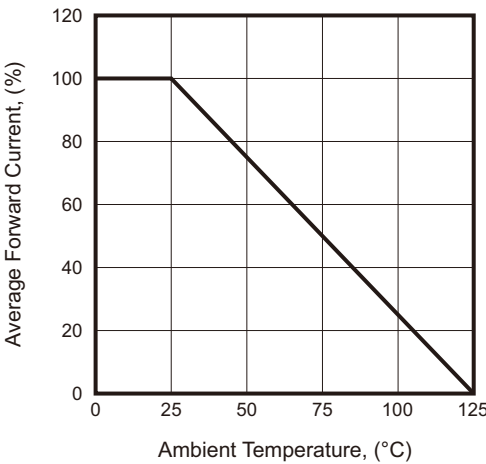
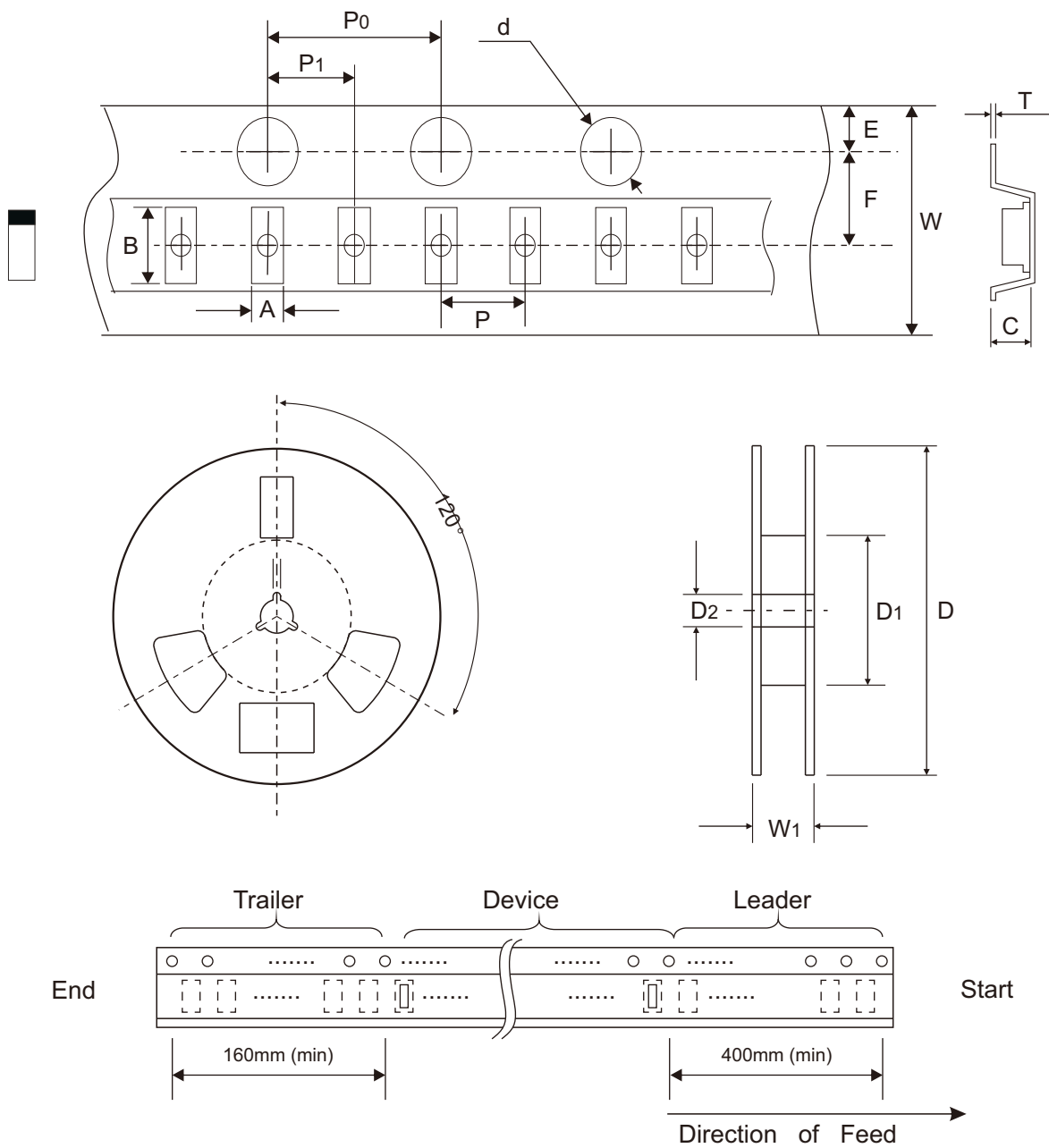


Fig.4 - Current Derating Curve



Reel Taping Specification



| 0201<br>(DFN0603) | SYMBOL | A             | B             | C             | d                        | D             | D1            | D2            |
|-------------------|--------|---------------|---------------|---------------|--------------------------|---------------|---------------|---------------|
|                   | (mm)   | 0.44 ± 0.03   | 0.74 ± 0.03   | 0.40 ± 0.03   | 1.50 + 0.10<br>- 0.00    | 178.00 ± 1.00 | 60.00 ± 0.50  | 13.50 ± 0.20  |
|                   | (inch) | 0.017 ± 0.001 | 0.029 ± 0.001 | 0.016 ± 0.001 | 0.059 + 0.004<br>- 0.000 | 7.008 ± 0.039 | 2.362 ± 0.020 | 0.531 ± 0.008 |

| 0201<br>(DFN0603) | SYMBOL | E             | F             | P             | P0            | P1            | T             | W                        | W1                       |
|-------------------|--------|---------------|---------------|---------------|---------------|---------------|---------------|--------------------------|--------------------------|
|                   | (mm)   | 1.75 ± 0.10   | 3.50 ± 0.05   | 2.00 ± 0.05   | 4.00 ± 0.10   | 2.00 ± 0.05   | 0.20 ± 0.03   | 8.00 + 0.30<br>- 0.10    | 12.00 + 0.50<br>- 0.00   |
|                   | (inch) | 0.069 ± 0.004 | 0.138 ± 0.002 | 0.079 ± 0.002 | 0.157 ± 0.004 | 0.079 ± 0.002 | 0.008 ± 0.001 | 0.315 + 0.012<br>- 0.004 | 0.472 + 0.020<br>- 0.000 |

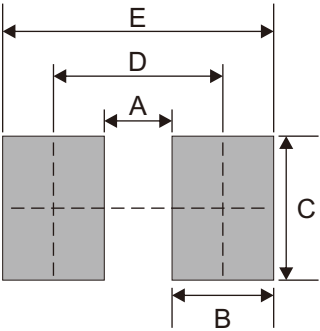
Marking Code

| Part Number    | Marking Code |
|----------------|--------------|
| ACPDZC0130L-HF | L            |



Suggested P.C.B. 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         | REEL PACK     |                     |
|-------------------|---------------|---------------------|
|                   | REEL<br>(pcs) | Reel Size<br>(inch) |
| 0201<br>(DFN0603) | 10,000        | 7                   |