

**WBFBP-02C Plastic-Encapsulate Diodes****DS751-40LED02** Schottky barrier Diode**DESCRIPTION**

Silicon epitaxial planar

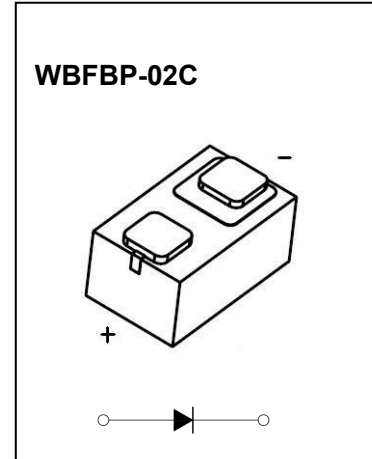
FEATURES

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability

APPLICATION

High speed switching for detection

For portable equipment:(i.e. Mobile phone,MP3, MD,CD-ROM, DVD-ROM, Note book PC, etc.)

**MARKING: 5****Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C**

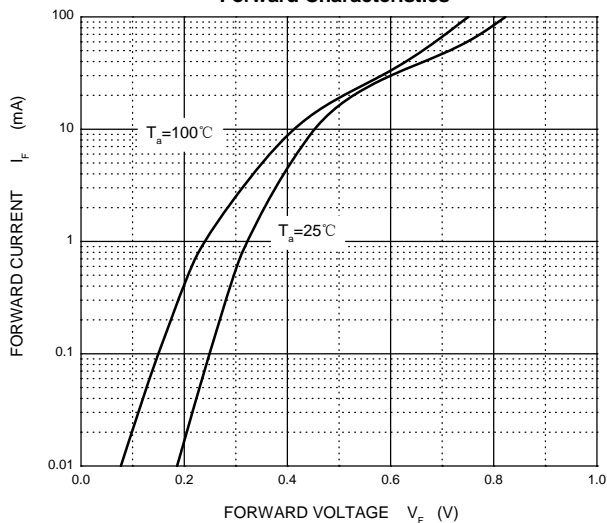
| Parameter | Symbol | Limits | Unit |
|---|-----------------|----------|------|
| Peak reverse voltage | V_{RM} | 40 | V |
| DC reverse voltage | V_R | 30 | V |
| Mean rectifying current | I_O | 30 | mA |
| Non-repetitive Peak forward surge Current@t=8.3ms | I_{FSM} | 150 | mA |
| Power dissipation | P_D | 100 | mW |
| Thermal Resistance from Junction to Ambient | $R_{\theta JA}$ | 1000 | °C/W |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -55~+150 | °C |

Electrical Ratings @Ta=25°C

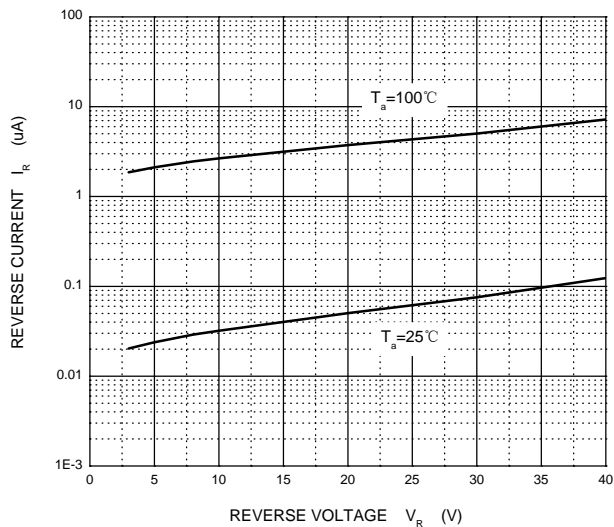
| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-------------------------------|--------|-----|-----|------|------|------------------|
| Forward voltage | V_F | | | 0.37 | V | $I_F=1mA$ |
| Reverse current | I_R | | | 0.5 | μA | $V_R=30V$ |
| Capacitance between terminals | C_T | | 2 | | pF | $V_R=1V, f=1MHZ$ |

Typical Characteristics

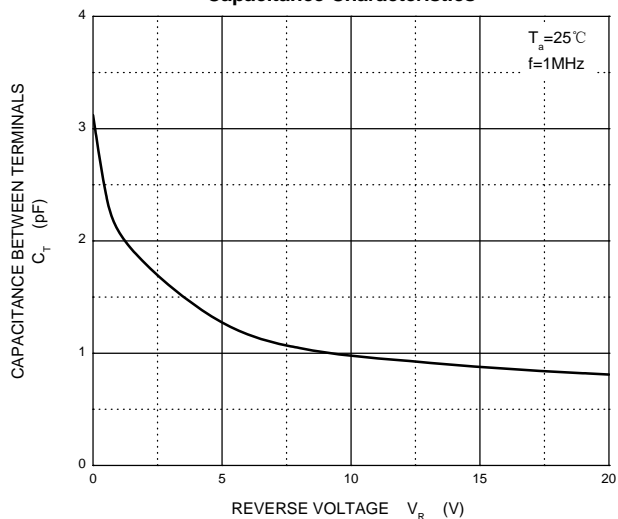
Forward Characteristics



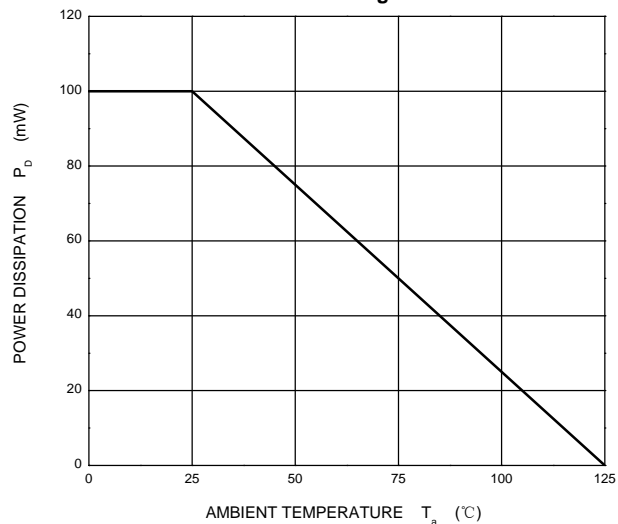
Reverse Characteristics



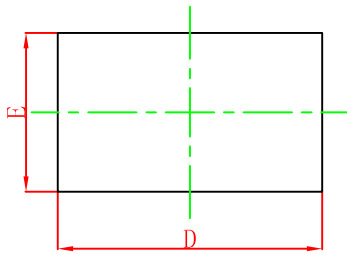
Capacitance Characteristics



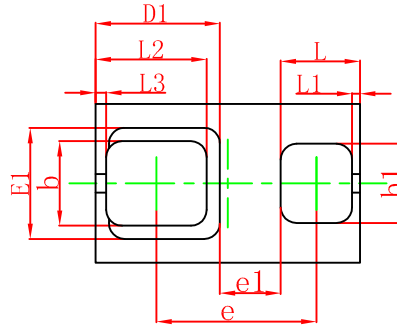
Power Derating Curve



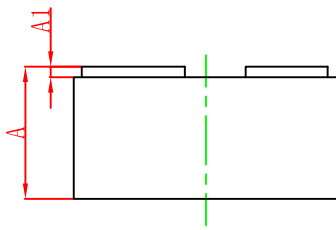
WBFBP-02C Package Outline Dimensions



TOP VIEW



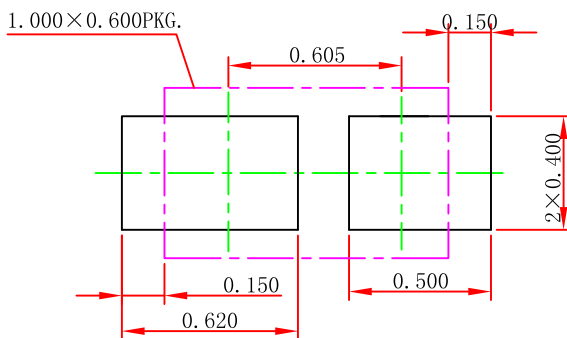
BOTTOM VIEW



SIDE VIEW

| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 0.450 | 0.550 | 0.018 | 0.022 |
| A1 | 0.010 | 0.100 | 0.000 | 0.004 |
| D | 0.950 | 1.050 | 0.037 | 0.041 |
| E | 0.550 | 0.650 | 0.022 | 0.026 |
| D1 | 0.470REF. | | 0.019REF. | |
| E1 | 0.420REF. | | 0.017REF. | |
| b | 0.270 | 0.370 | 0.011 | 0.015 |
| b1 | 0.250 | 0.350 | 0.010 | 0.014 |
| e | 0.555 | 0.655 | 0.022 | 0.026 |
| e1 | 0.230REF. | | 0.009REF. | |
| L | 0.250 | 0.350 | 0.010 | 0.014 |
| L1 | 0.030REF. | | 0.001REF. | |
| L2 | 0.370 | 0.470 | 0.015 | 0.019 |
| L3 | 0.040REF. | | 0.002REF. | |

WBFBP-02C Suggested Pad Layout



Note:

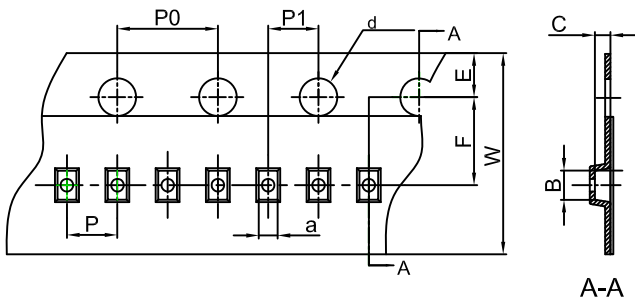
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.050 mm.
3. The pad layout is for reference purposes only.

NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

DFN/FBP(1.0X0.6) Tape and Reel

DFN/FBP(1.0×0.6) Embossed Carrier Tape

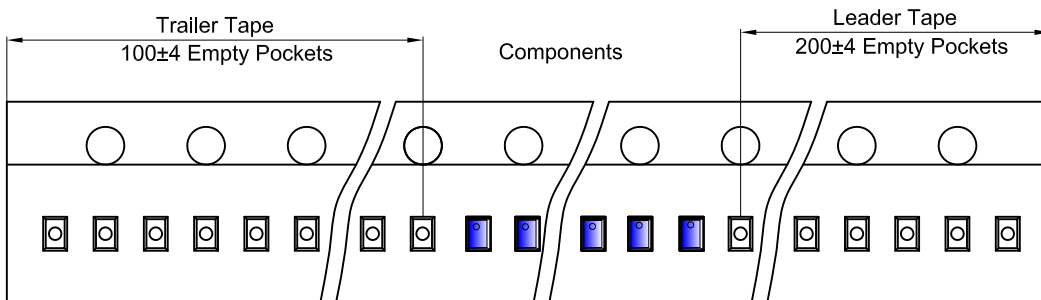


Packaging Description:

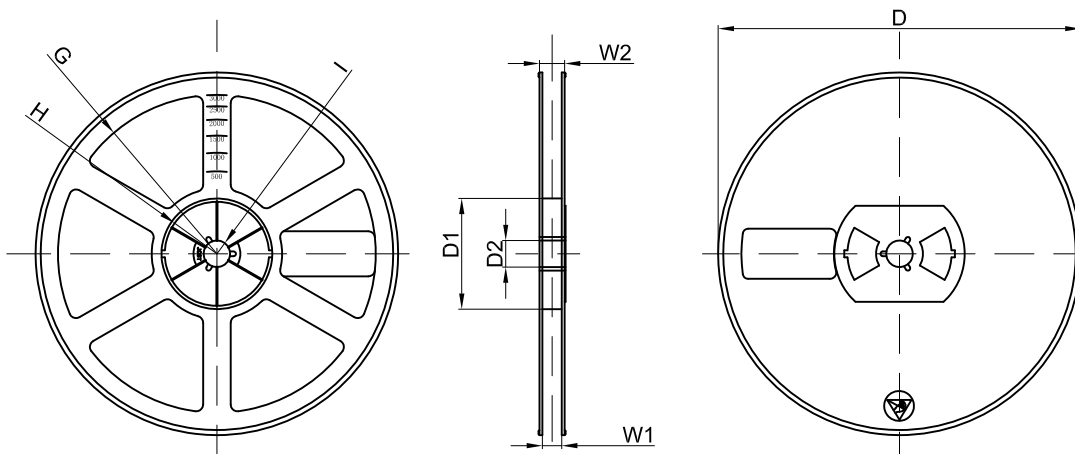
DFN/FBP(1.0×0.6) parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 10,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

| Dimensions are in millimeter | | | | | | | | | | |
|------------------------------|------|------|------|-------|------|------|------|------|------|------|
| Pkg type | a | B | C | d | E | F | P0 | P | P1 | W |
| DFN/FBP(1.0×0.6) | 0.66 | 1.15 | 0.66 | ∅1.50 | 1.75 | 3.50 | 4.00 | 2.00 | 2.00 | 8.00 |

DFN/FBP(1.0×0.6) Tape Leader and Trailer



DFN/FBP(1.0×0.6) Reel



| Dimensions are in millimeter | | | | | | | | |
|------------------------------|---------|-------|-------|--------|--------|-------|------|-------|
| Reel Option | D | D1 | D2 | G | H | I | W1 | W2 |
| 7" Dia | ∅178.00 | 54.40 | 13.00 | R78.00 | R25.60 | R6.50 | 9.50 | 12.30 |

| REEL | Reel Size | Box | Box Size(mm) | Carton | Carton Size(mm) | G.W.(kg) |
|-----------|-----------|-------------|--------------|-------------|-----------------|----------|
| 10000 pcs | 7 inch | 150,000 pcs | 203×203×195 | 600,000 pcs | 438×438×220 | |