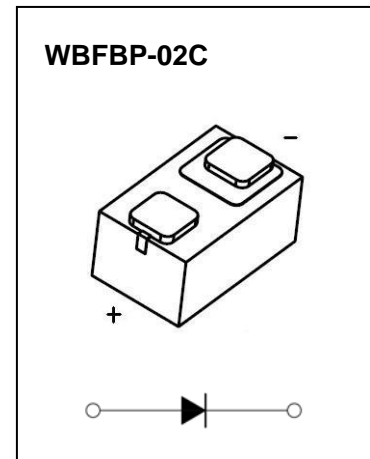


**WBFBP-02C Plastic-Encapsulate Diodes****DSS70LED02** Schottky barrier diode**DESCRIPTION**

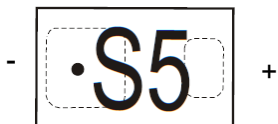
Planar Schottky barrier diode with an integrated guard ring for stress protection.

FEATURES

- Low diode capacitance
- Low forward voltage
- Guard ring protected
- High breakdown voltage

**APPLICATIONS**

- Ultra high-speed switching
- Voltage clamping
- Protection circuits
- Mobile communication ,digital (still) cameras , PDAs and PCMCIA cards

MARKING: S5**Maximum ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted)**

| Parameter | Symbol | Limits | Unit |
|---|-----------------|------------|-----------------------------|
| DC Reverse Voltage | V_R | 70 | V |
| Continuous Forward Current | I_F | 70 | mA |
| Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$ | I_{FSM} | 100 | mA |
| Power Dissipation | P_D | 100 | mW |
| Thermal Resistance from Junction to Ambient | $R_{\theta JA}$ | 1000 | $^{\circ}\text{C}/\text{W}$ |
| Operating Junction Temperature Range | T_J | -40 ~ +125 | $^{\circ}\text{C}$ |
| Storage Temperature Range | T_{stg} | -55 ~ +150 | $^{\circ}\text{C}$ |

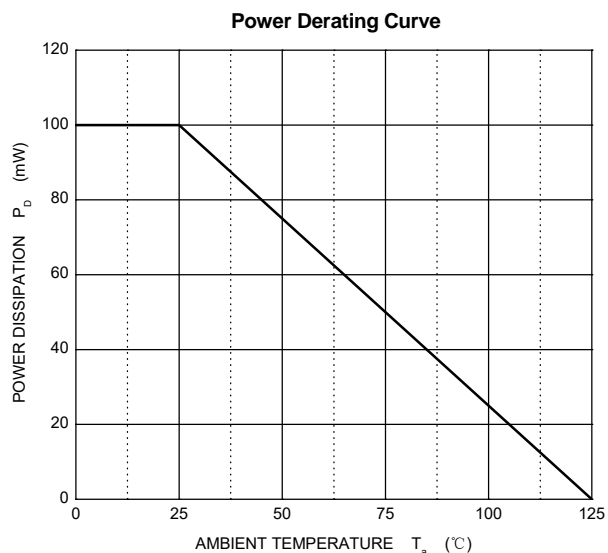
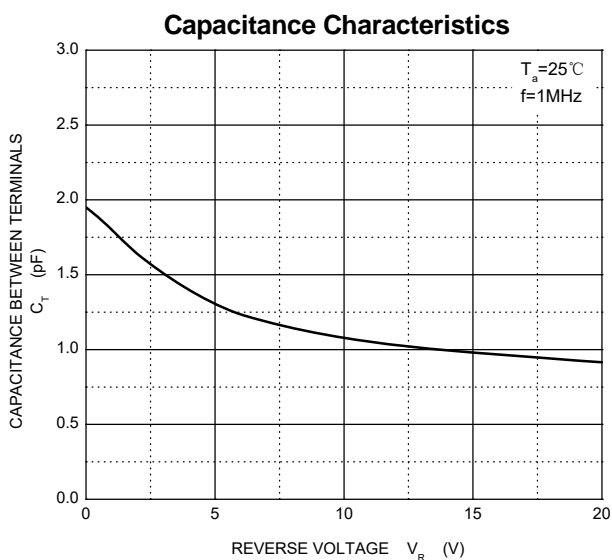
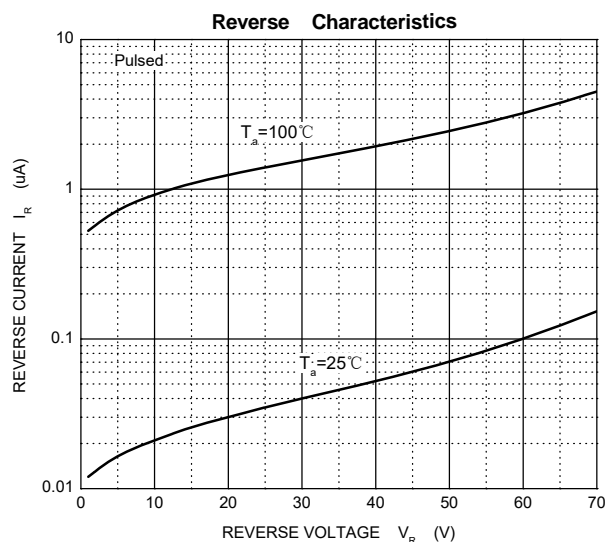
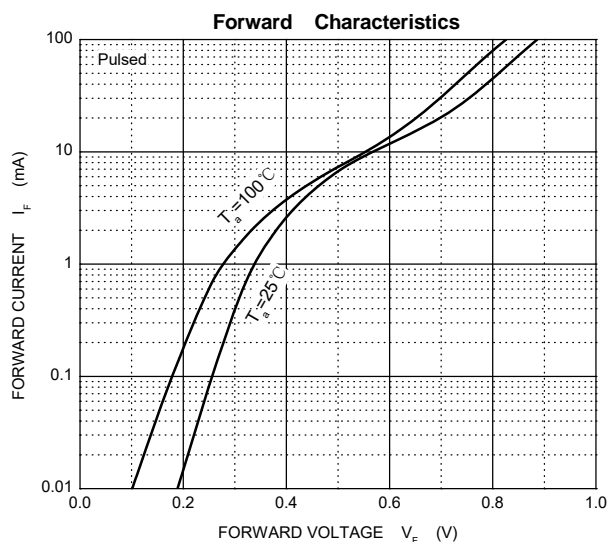
MOSFET ELECTRICAL CHARACTERISTICS

$T_a=25\text{ }^\circ\text{C}$ unless otherwise specified

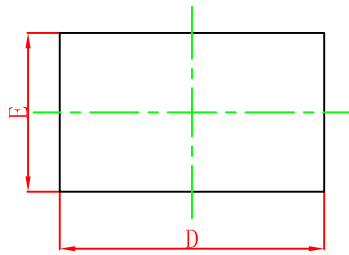
| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-----------------------------|--------|-----|-----|------|------|-----------------------------------|
| Continuous forward voltage | V_F | | | 410 | mV | $I_F=1\text{mA}$ |
| | | | | 750 | | $I_F=10\text{mA}$ |
| | | | | 1000 | | $I_F=15\text{mA}$ |
| Continuous reverse current* | I_R | | | 100 | nA | $V_R=50\text{V}$ |
| | | | | 500 | | $V_R=70\text{V}$ |
| Diode capacitance | C_d | | | 2 | pF | $V_R=0\text{V}$, $f=1\text{MHz}$ |

*Pulse Test: Pulse width=300 μs ;Duty cycle=0.02.

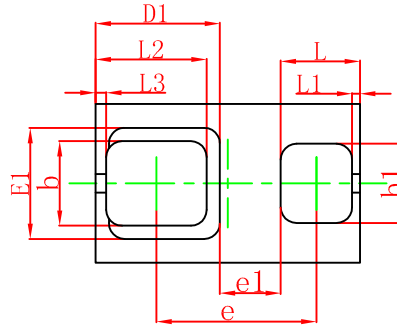
Typical Characteristics



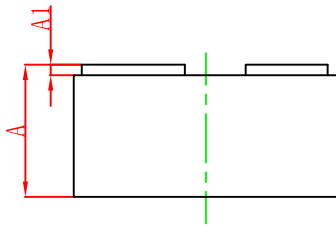
WBFBP-02C Package Outline Dimensions



TOP VIEW



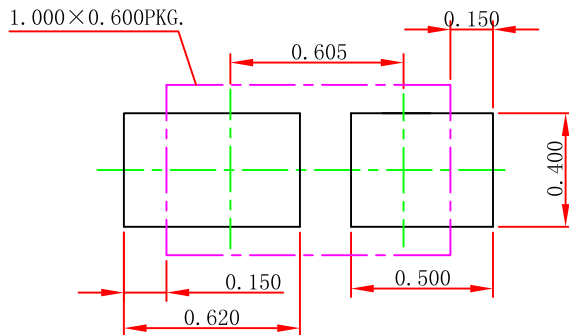
BOTTOM VIEW



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:

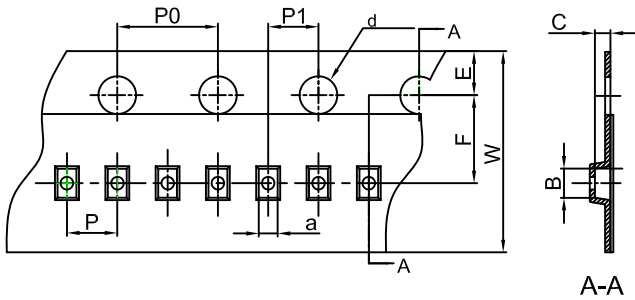
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.050 mm.
3. The pad layout is for reference purposes only.

NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ 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

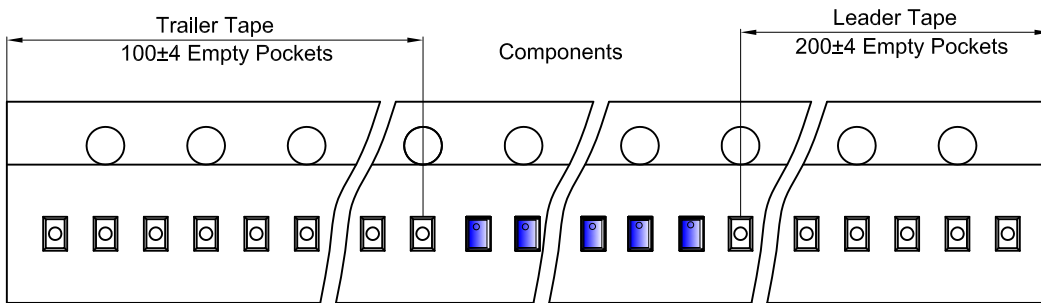


Packaging Description:

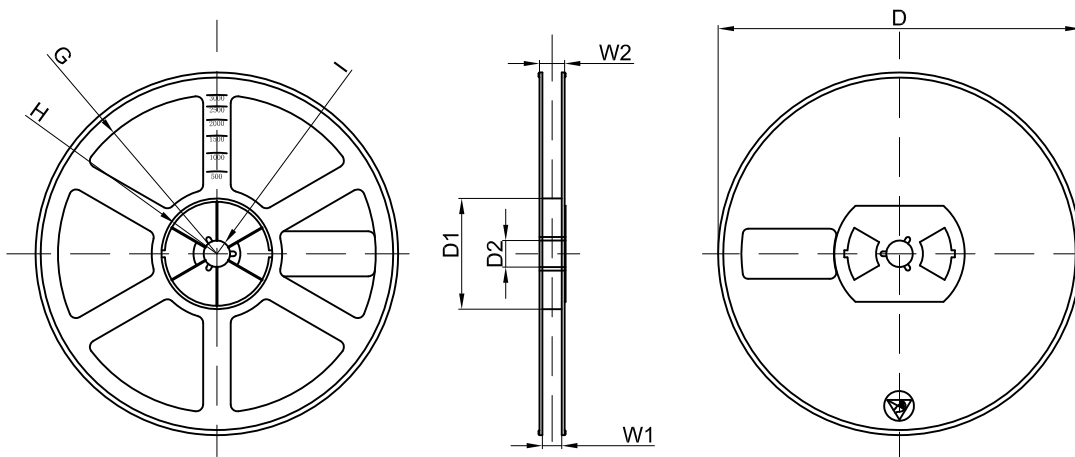
DFN/FBP(1.0×0.6) parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled 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 | Ø1.50 | 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 | Ø178.00 | 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 | |