



WBFBP-02C-A Plastic-Encapsulate Diodes

DS520-30Y1 SCHOTTKY BARRIER DIODE

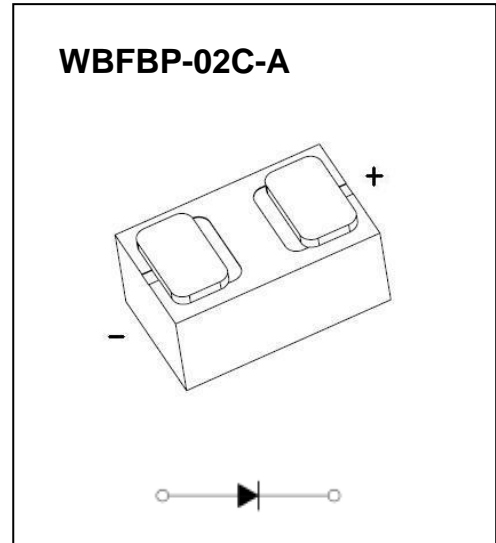
FEATURE

- 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



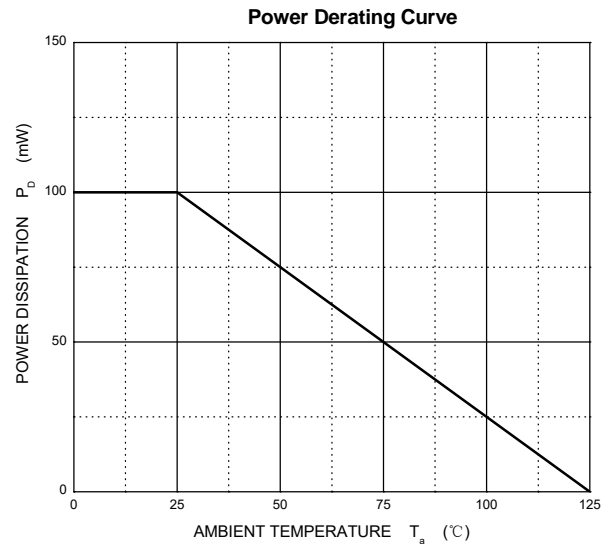
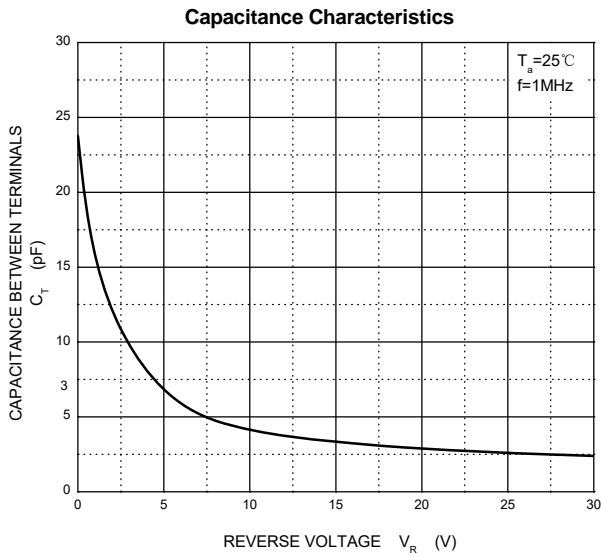
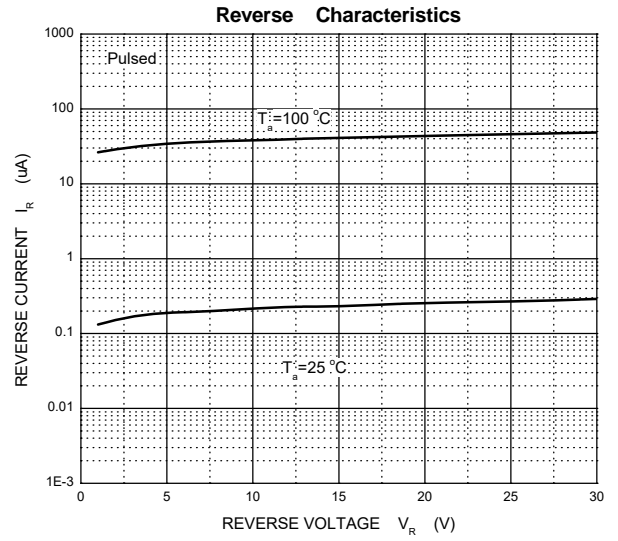
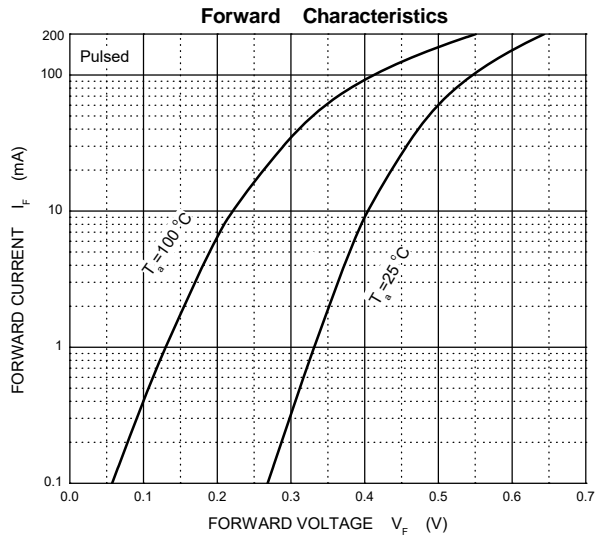
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

| Symbol | Parameter | Limit | Unit |
|---------------------|--|------------|------|
| V _{RRM} | Repetitive Peak Reverse Voltage | 30 | V |
| V _{RWM} | Working Peak Reverse Voltage | | |
| V _{R(RMS)} | RMS Reverse Voltage | 21 | V |
| I _O | Average Rectified Output Current | 200 | mA |
| I _{FSM} | Non-Repetitive Peak Forward Surge Current@ t=8.3ms | 0.5 | A |
| P _d | Power Dissipation | 100 | mW |
| R _{θJA} | Thermal Resistance from Junction to Ambient | 1000 | °C/W |
| T _J | Operating Junction Temperature Range | -40 ~ +125 | °C |
| T _{stg} | Storage Temperature Range | -55 ~ +150 | °C |

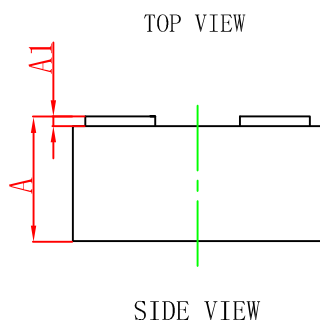
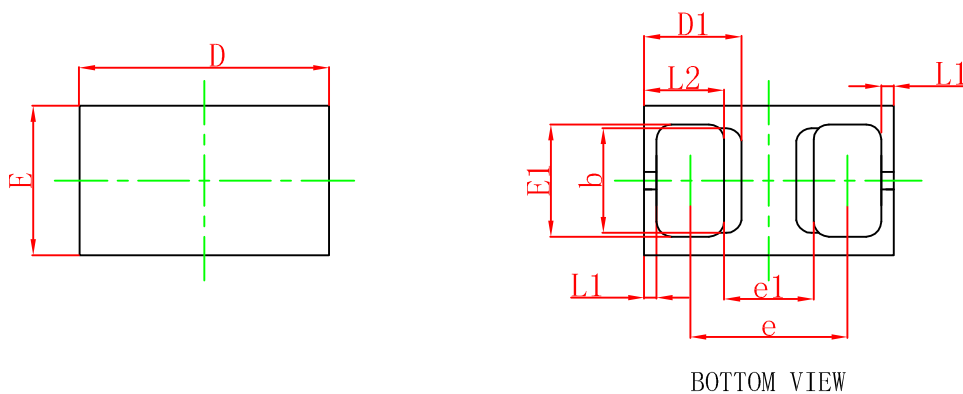
ELECTRICAL CHARACTERISTICS (T_a = 25°C unless otherwise specified)

| Parameter | Symbol | Test Condition | Min | Typ | Max | Unit |
|---------------------------|-------------------|-----------------------|-----|------|------|------|
| Reverse breakdown voltage | V _(BR) | I _R =100μA | 30 | | | V |
| Reverse current | I _R | V _R =10V | | | 1.0 | μA |
| Forward voltage | V _F | I _F =10mA | | | 0.45 | V |
| | | I _F =100mA | | | 0.60 | V |
| | | I _F =200mA | | 0.65 | 0.70 | V |

Typical Characteristics

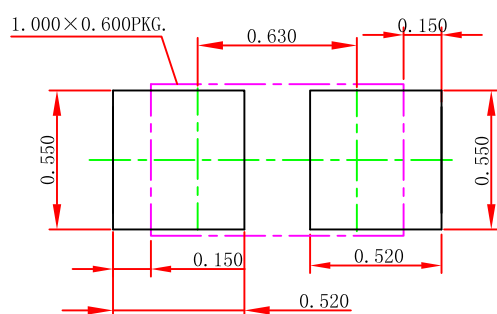


WBFBP-02C-A Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 0.450 | 0.550 | 0.018 | 0.022 |
| A1 | 0.010 | 0.090 | 0.000 | 0.004 |
| D | 0.950 | 1.050 | 0.037 | 0.041 |
| E | 0.550 | 0.650 | 0.022 | 0.026 |
| D1 | 0.390REF. | | 0.015REF. | |
| E1 | 0.400 | 0.500 | 0.016 | 0.020 |
| b | 0.420REF. | | 0.017REF. | |
| e | 0.580 | 0.680 | 0.023 | 0.027 |
| e1 | 0.360REF. | | 0.014REF. | |
| L1 | 0.050REF. | | 0.002REF. | |
| L2 | 0.270 | 0.370 | 0.011 | 0.015 |

WBFBP-02C-A Suggested Pad Layout



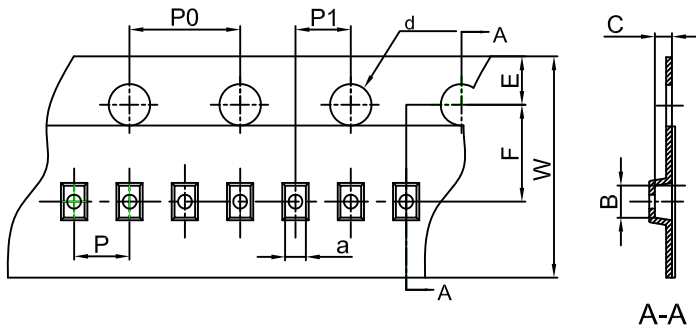
Note:

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.

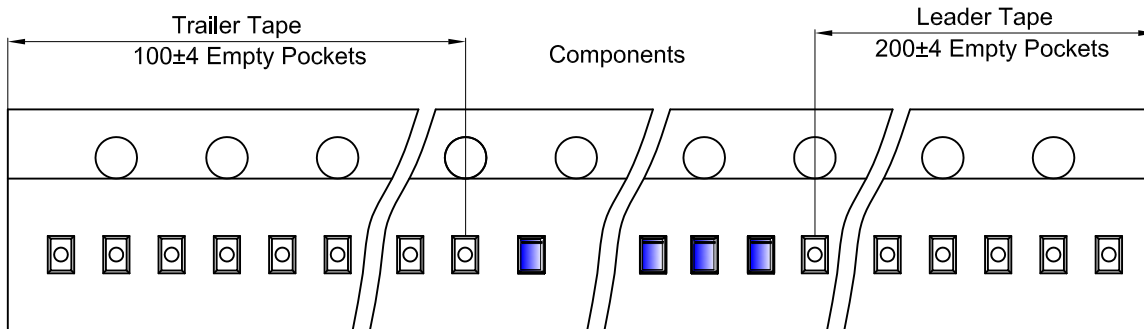
DFN/FBP(1.0×0.6) Embossed Carrier Tape



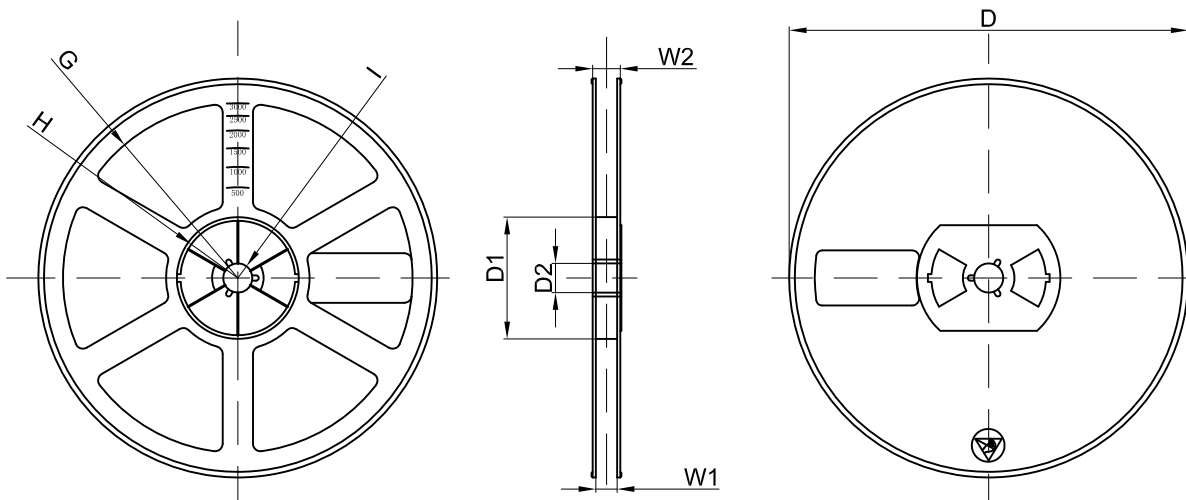
Packaging Description:
DFN/FBP(1.0×0.6) parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed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