

DFNWB0.6x0.3-2L-B Plastic-Encapsulate Diodes

DS751-40EAA02 SCHOTTKY BARRIER DIODE

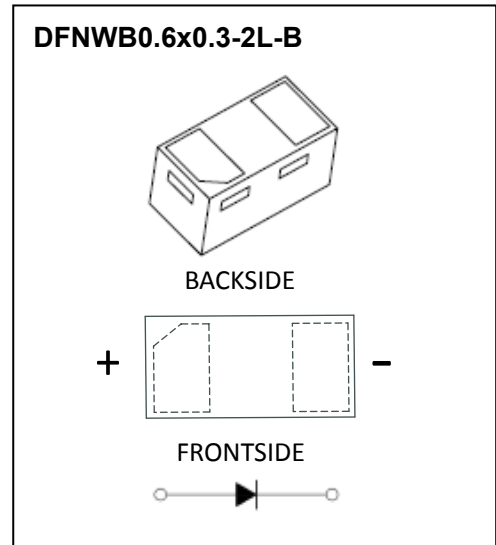
FEATURE

- 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 ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

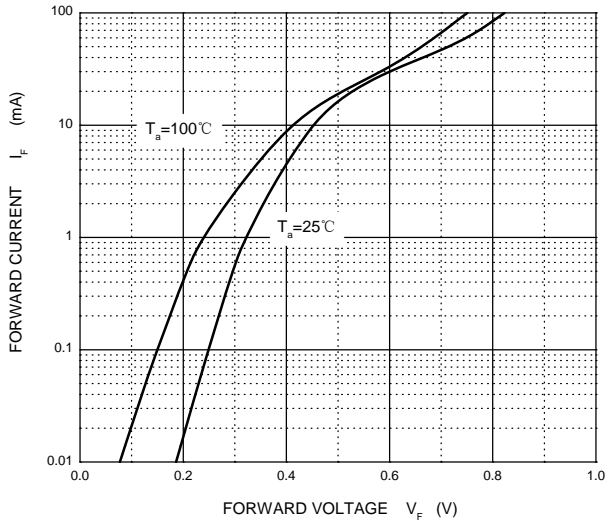
| Symbol | Parameter | Limit | Unit |
|-----------------|---|------------|-----------------------------|
| V_{RRM} | Repetitive Peak Reverse Voltage | 40 | V |
| V_{RWM} | Working Peak Reverse Voltage | | |
| $V_{R(RMS)}$ | RMS Reverse Voltage | 28 | V |
| I_O | Average Rectified Output Current | 30 | mA |
| I_{FSM} | Non-Repetitive Peak Forward Surge Current@ $t=8.3\text{ms}$ | 200 | mA |
| P_d | Power Dissipation | 100 | mW |
| $R_{\theta JA}$ | Thermal Resistance from Junction to Ambient | 1000 | $^{\circ}\text{C}/\text{W}$ |
| T_J | Junction temperature | 125 | $^{\circ}\text{C}$ |
| T_{stg} | Storage Temperature | -55 ~ +150 | $^{\circ}\text{C}$ |

ELECTRICAL CHARACTERISTICS ($T_a = 25^{\circ}\text{C}$ unless otherwise specified)

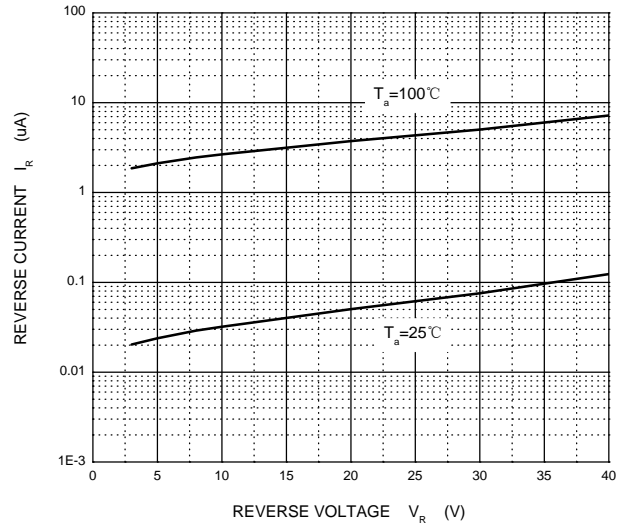
| Parameter | Symbol | Test Condition | Min | Typ | Max | Unit |
|-------------------------------|------------|--------------------------------|-----|-----|------|---------------|
| Reverse breakdown voltage | $V_{(BR)}$ | $I_R=1\text{mA}$ | 40 | | | V |
| Reverse current | I_R | $V_R=30\text{V}$ | | | 0.5 | μA |
| Forward voltage | V_F | $I_F=1\text{mA}$ | | | 0.37 | V |
| Capacitance between terminals | C_T | $V_R=1\text{V}, f=1\text{MHz}$ | | 2 | | pF |

Typical Characteristics

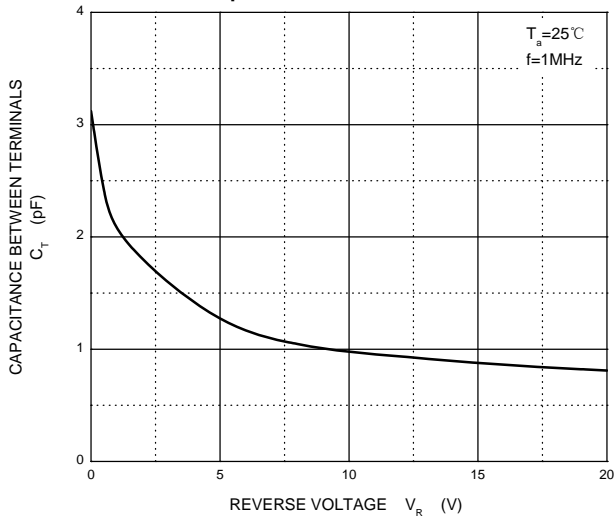
Forward Characteristics



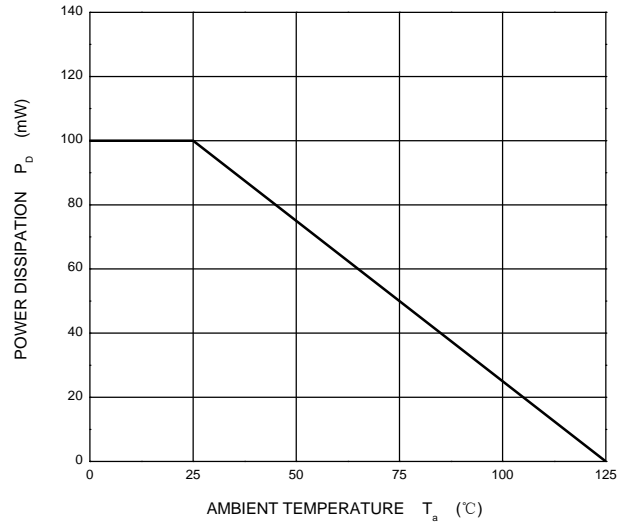
Reverse Characteristics



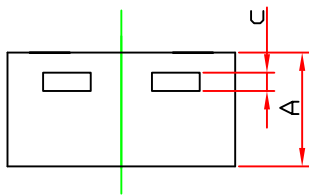
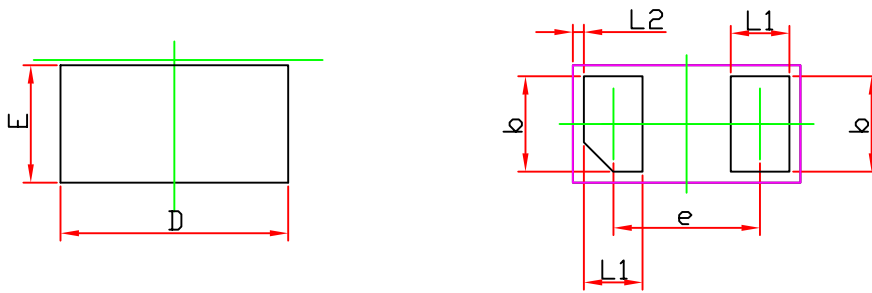
Capacitance Characteristics



Power Derating Curve

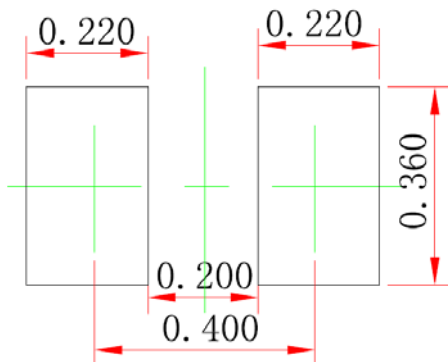


DFNWB0.6×0.3-2L-B Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 0.275 | 0.340 | 0.011 | 0.013 |
| D | 0.570 | 0.670 | 0.022 | 0.026 |
| E | 0.270 | 0.370 | 0.011 | 0.015 |
| b | 0.225 | 0.295 | 0.009 | 0.012 |
| c | 0.050 REF. | | 0.002 REF. | |
| e | 0.365 | 0.435 | 0.014 | 0.017 |
| L1 | 0.125 | 0.195 | 0.005 | 0.008 |
| L2 | 0.030 REF. | | 0.001 REF. | |

DFNWB0.6×0.3-2L-B Suggested Pad Layout



Note:

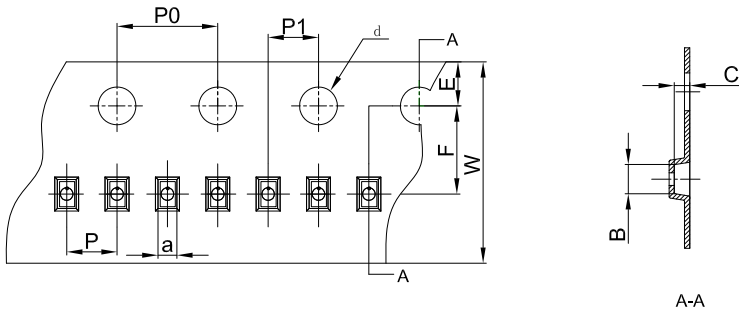
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.050 mm.
3. The pad layout is for reference purposes only.

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.

DFNWB0.6X0.3-2L Tape and Reel

DFNWB0.6x0.3-2L Embossed Carrier Tape



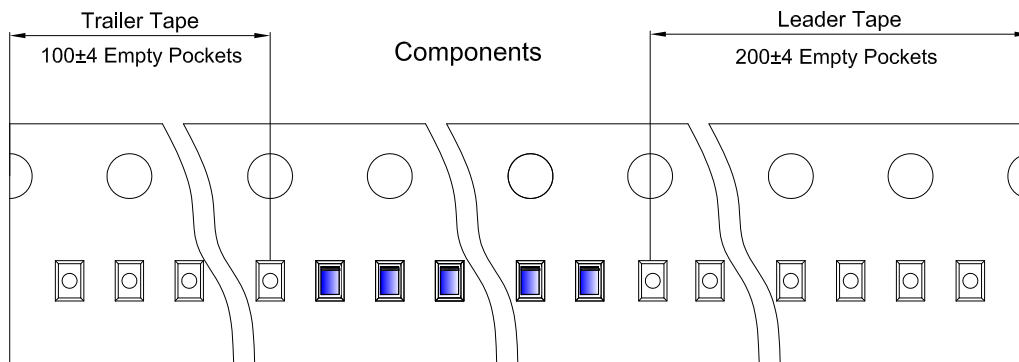
Packaging Description:

DFNWB0.6x0.3-2L 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).

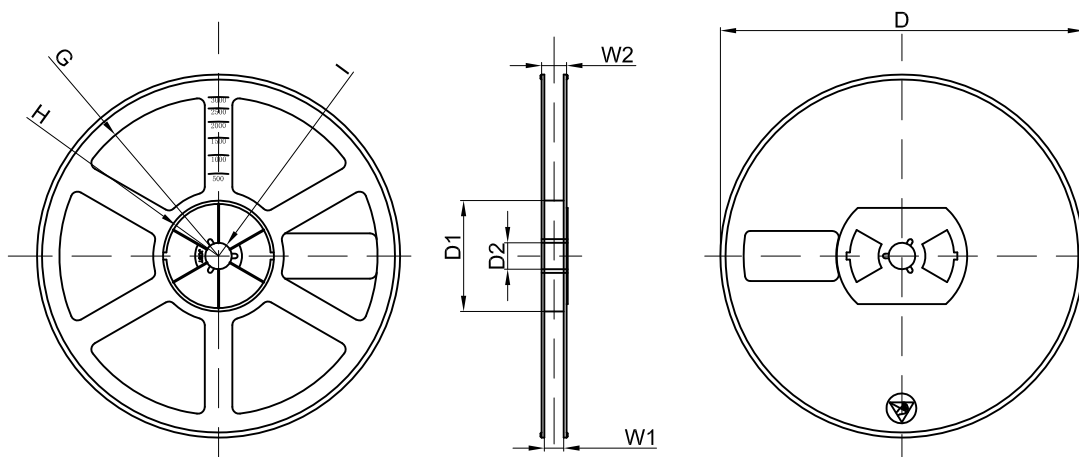
Note: If it is the product of the same polarity, the cathode line should be removed.

| Dimensions are in millimeter | | | | | | | | | | |
|------------------------------|------|------|------|-------|------|------|------|------|------|------|
| Pkg type | a | B | C | d | E | F | P0 | P | P1 | W |
| DFNWB0.6x0.3-2L | 0.41 | 0.70 | 0.38 | Ø1.50 | 1.75 | 3.50 | 4.00 | 2.00 | 2.00 | 8.00 |

DFNWB0.6x0.3-2L Tape Leader and Trailer



DFNWB0.6x0.3-2L 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) |
|------------|-----------|-------------|--------------|-------------|-----------------|----------|
| 10,000 pcs | 7 inch | 150,000 pcs | 203×203×195 | 600,000 pcs | 438×438×220 | |