



WBFBP-06C Plastic-Encapsulate Diode

FBAS40TW

SURFACE MOUNT SCHOTTKY BARRIER DIODE ARRAYS

DESCRIPTION

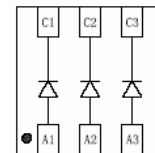
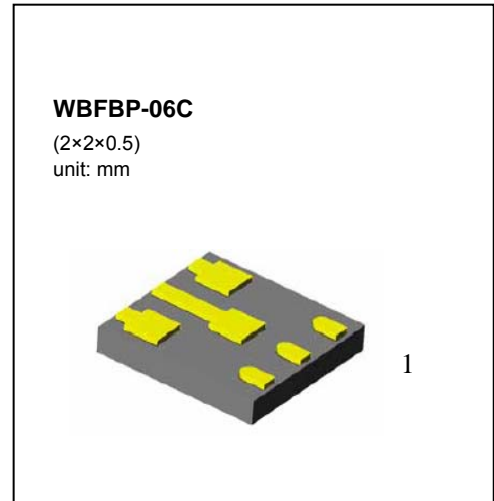
Silicon epitaxial planar
PN Junction Guard Ring for Schottky Diode

FEATURES

- Low Forward Voltage Drop
- Fast Switching
- Ultra-Small Surface Mount Package

APPLICATION

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



FBAS40TW
Marking:K43

Maximum Ratings @ $T_A=25^{\circ}\text{C}$

| Parameter | Symbol | Limits | Unit |
|---|-----------------|---------|-----------------------------|
| Peak Repetitive reverse voltage | V_{RM} | 40 | V |
| DC Blocking Voltage | V_R | | |
| Average Rectified Output Current | I_O | 40 | mA |
| Power Dissipation | P_d | 150 | mW |
| Thermal Resistance. Junction to Ambient Air | $R_{\theta JA}$ | 625 | $^{\circ}\text{C}/\text{W}$ |
| Junction temperature | T_J | 125 | $^{\circ}\text{C}$ |
| Storage temperature range | T_{STG} | -65-125 | $^{\circ}\text{C}$ |

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

| Parameter | Symbol | Test conditions | MIN | MAX | UNIT |
|---------------------------------|----------|--|-----|-------------|------|
| Reverse voltage leakage current | I_R | $V_R=30\text{V}$ | | 200 | nA |
| Forward voltage | V_F | $I_F=1\text{mA}$ $I_F=40\text{mA}$ | | 380 1000 | mV |
| Total capacitance | C_T | $V_R=0, f=1\text{MHz}$ | | 5 | pF |
| Reverse recovery time | t_{rr} | $I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R,$ $R_L=100\ \Omega$ | | 5 | nS |

Typical Characteristics

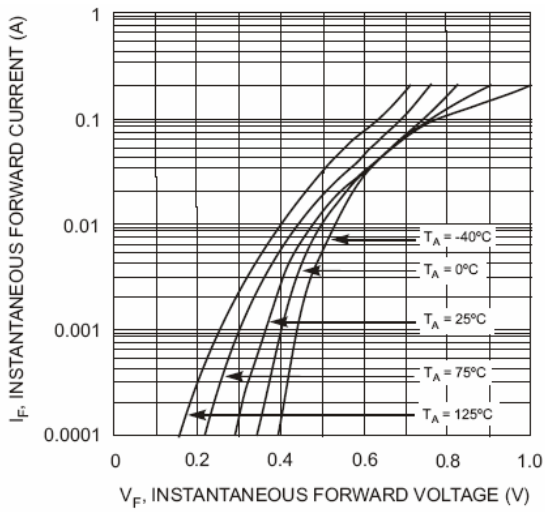


Fig. 1 Typical Forward Voltage

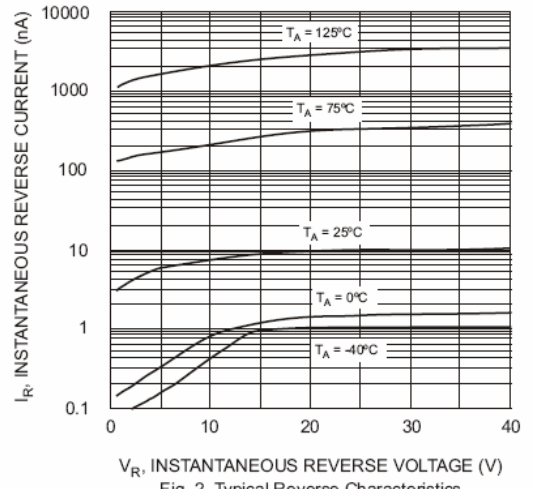


Fig. 2 Typical Reverse Characteristics

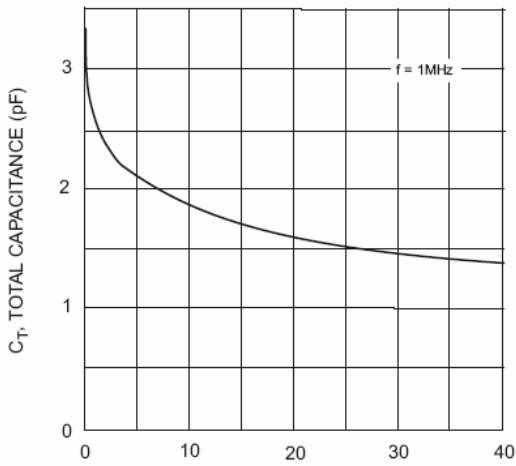


Fig. 3 Typical Capacitance

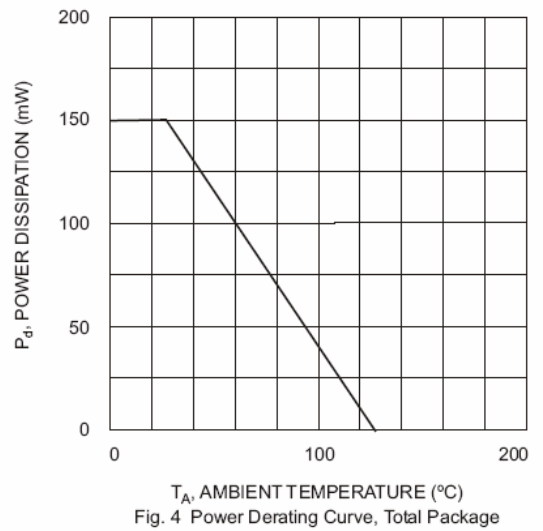
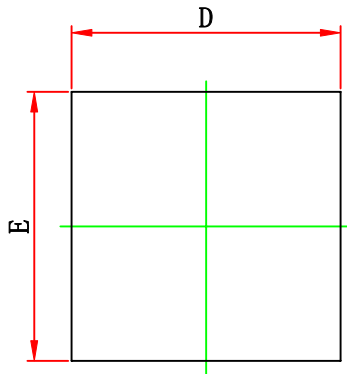


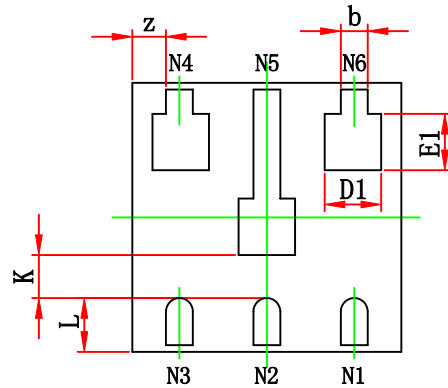
Fig. 4 Power Derating Curve, Total Package



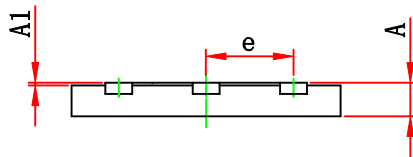
WBFBP-06C(2×2×0.5) PACKAGE OUTLINE DIMENSIONS



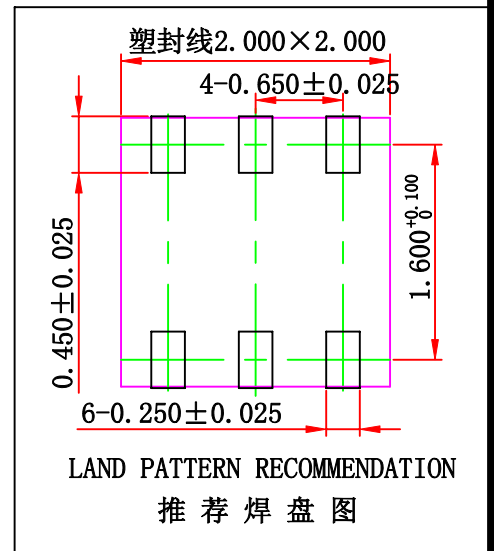
TOP VIEW



BOTTOM VIEW

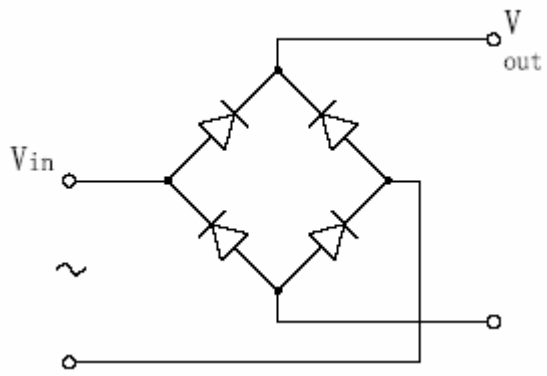


SIDE VIEW



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 0.450 | 0.550 | 0.018 | 0.022 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| b | 0.150 | 0.250 | 0.006 | 0.010 |
| D | 1.900 | 2.100 | 0.075 | 0.083 |
| E | 1.900 | 2.100 | 0.075 | 0.083 |
| D1 | 0.420 REF. | | 0.017 REF. | |
| E1 | 0.420 REF. | | 0.017 REF. | |
| e | 0.650 TYP. | | 0.026 TYP. | |
| L | 0.400 REF. | | 0.016 REF. | |
| k | 0.300 REF. | | 0.012 REF. | |
| z | 0.500 REF. | | 0.020 REF. | |

APPLICATION CIRCUITS



Bridge rectifiers