



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

## WBFBP-06C Plastic-Encapsulate Diode

### FBAS40TW

SURFACE MOUNT SCHOTTKY BARRIER DIODE ARRAYS

#### DESCRIPTION

Silicon epitaxial planar

PN Junction Guard Ring for Schottky Diode

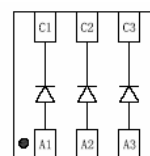
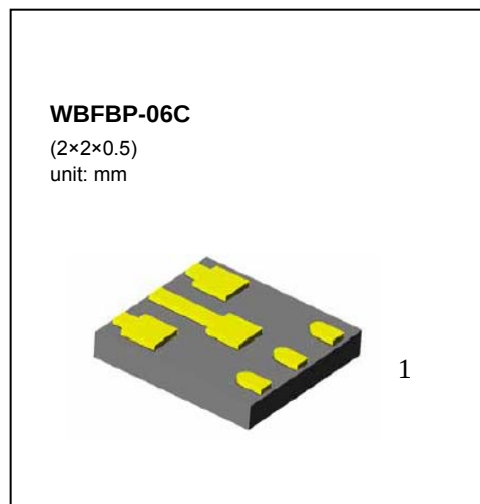
#### FEATURES

- 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<sub>A</sub>=25°C

| Parameter                                   | Symbol           | Limits  | Unit |
|---------------------------------------------|------------------|---------|------|
| Peak Repetitive reverse voltage             | V <sub>RM</sub>  | 40      | V    |
| DC Blocking Voltage                         | V <sub>R</sub>   |         |      |
| Average Rectified Output Current            | I <sub>O</sub>   | 40      | mA   |
| Power Dissipation                           | P <sub>d</sub>   | 150     | mW   |
| Thermal Resistance. Junction to Ambient Air | R <sub>θJA</sub> | 625     | °C/W |
| Junction temperature                        | T <sub>J</sub>   | 125     | °C   |
| Storage temperature range                   | T <sub>STG</sub> | -65-125 | °C   |

#### ELECTRICAL CHARACTERISTICS (T<sub>amb</sub>=25°C unless otherwise specified)

| Parameter                       | Symbol          | Test conditions                                                                                      | MIN | MAX         | UNIT |
|---------------------------------|-----------------|------------------------------------------------------------------------------------------------------|-----|-------------|------|
| Reverse voltage leakage current | I <sub>R</sub>  | V <sub>R</sub> =30V                                                                                  |     | 200         | nA   |
| Forward voltage                 | V <sub>F</sub>  | I <sub>F</sub> =1mA<br>I <sub>F</sub> =40mA                                                          |     | 380<br>1000 | mV   |
| Total capacitance               | C <sub>T</sub>  | V <sub>R</sub> =0,f=1MHz                                                                             |     | 5           | pF   |
| Reverse recovery time           | t <sub>rr</sub> | I <sub>F</sub> = I <sub>R</sub> =10mA,I <sub>rr</sub> =0.1×I <sub>R</sub> ,<br>R <sub>L</sub> =100 Ω |     | 5           | nS   |

# Typical Characteristics

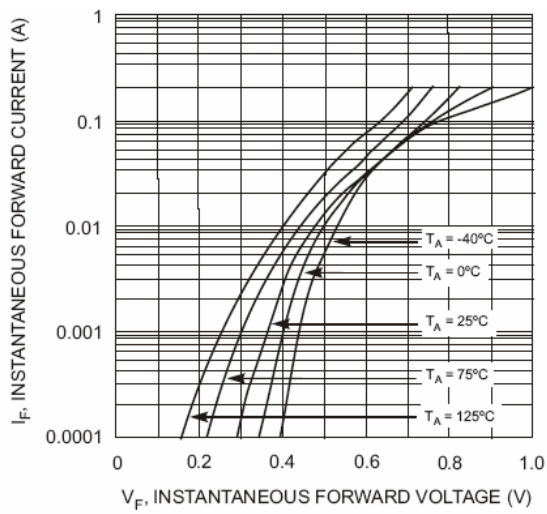


Fig. 1 Typical Forward Voltage

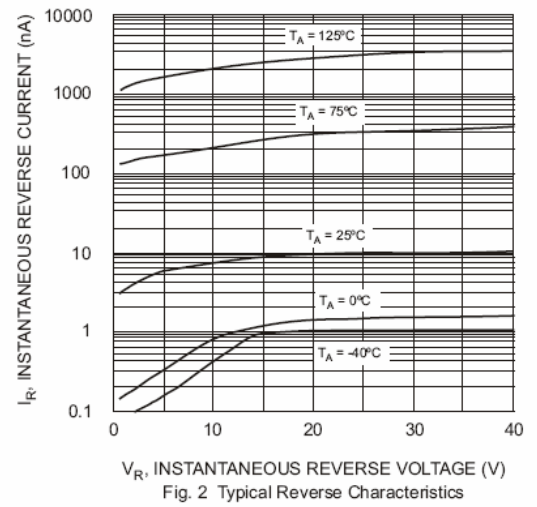


Fig. 2 Typical Reverse Characteristics

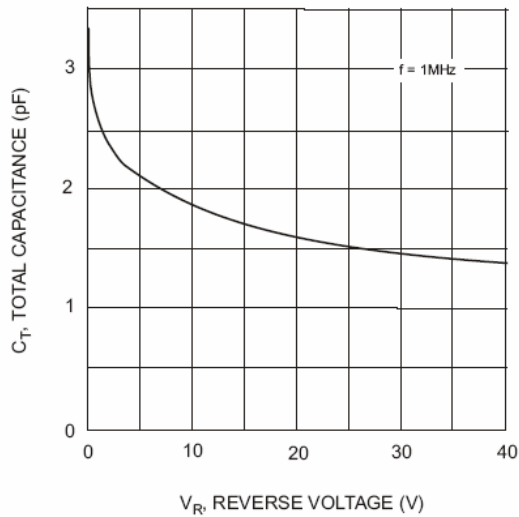


Fig. 3 Typical Capacitance

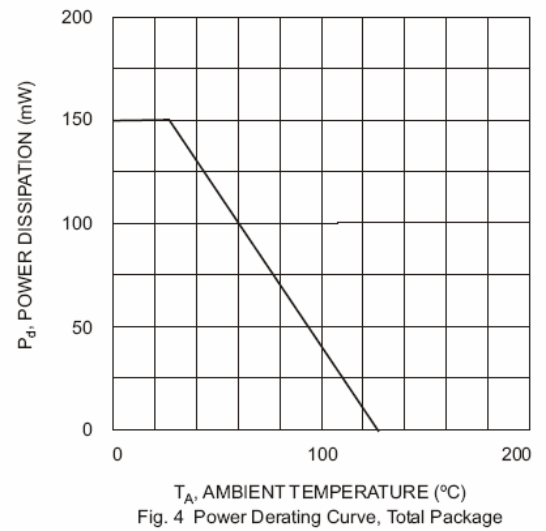
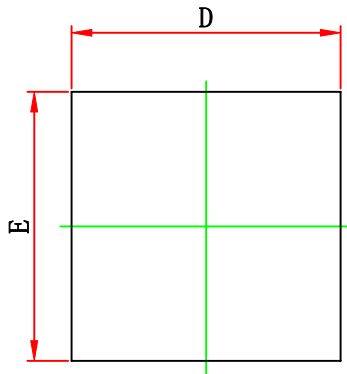


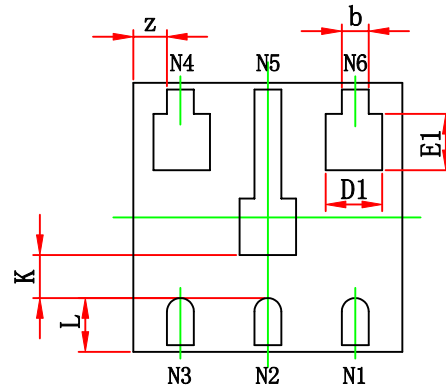
Fig. 4 Power Derating Curve, Total Package



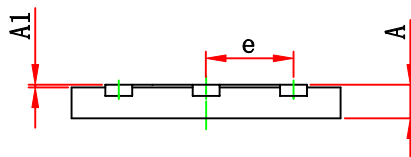
## WBFBP-06C(2×2×0.5) PACKAGE OUTLINE DIMENSIONS



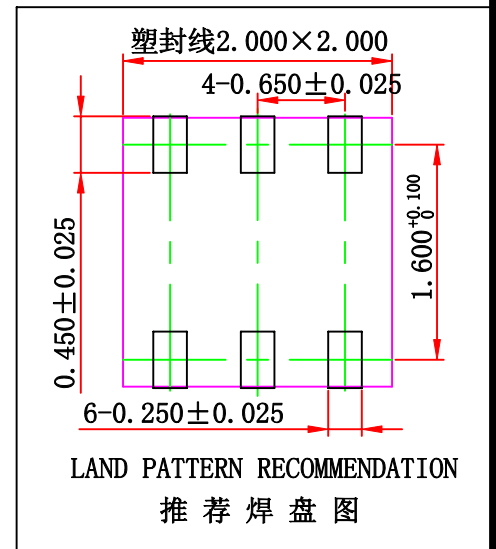
TOP VIEW



BOTTOM VIEW

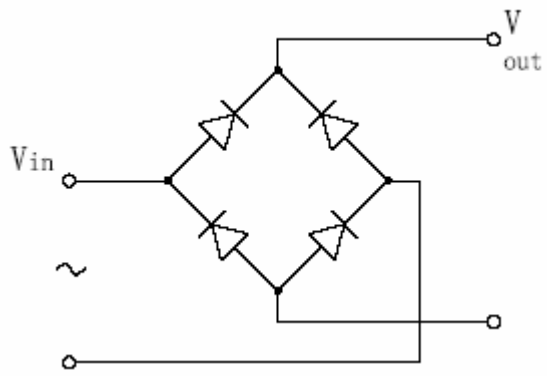


SIDE VIEW



| 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

This datasheet has been download from:

[www.cj-elec.com](http://www.cj-elec.com)

Datasheets for electronics components