

**WBFBP-03B Plastic-Encapsulate Transistors****BAT54M**

SCHOTTKY DIODE

DESCRIPTION

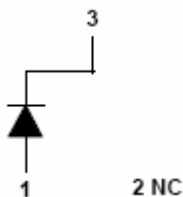
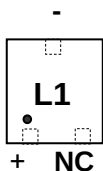
Epitaxial planar Silicon diode

FEATURES

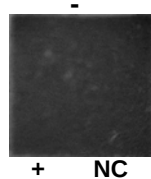
- Ultra-Small Surface Mount Package
- Low Forward Voltage Drop
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Available in Lead Free Version

APPLICATION

Ultra high speed switching
For portable equipment:(i.e. Mobile phone,MP3, MD,CD-ROM,
DVD-ROM, Note book PC, etc.)

MARKING: L1**WBFBP-03B**

(1.2×1.2×0.5)
unit: mm

TOP

1. ANODE

2. NC

3.CATHODE

BACK**Maximum Ratings @T_A=25°C**

Parameter	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	30	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
Forward Continuous Current (Note 1)	I _{FM}	200	mA
Repetitive Peak Forward Current	I _{FRM}	300	mA
Forward Surge Current @ t < 1.0s	I _{FSM}	600	mA
Power Dissipation (Note 1)	P _d	150	mW
Thermal Resistance, Junction to Ambient (Note 1)	R _{θJA}	833	°C/W
Junction temperature	T _J	125	°C
Storage temperature range	T _{STG}	-65-125	°C

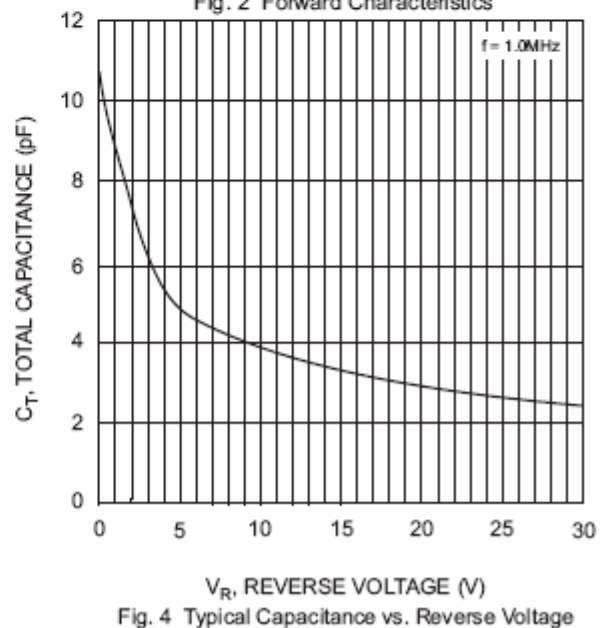
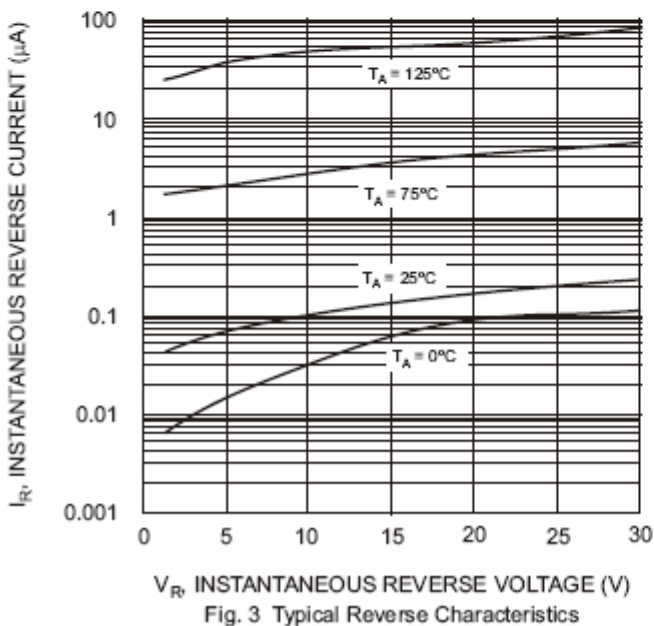
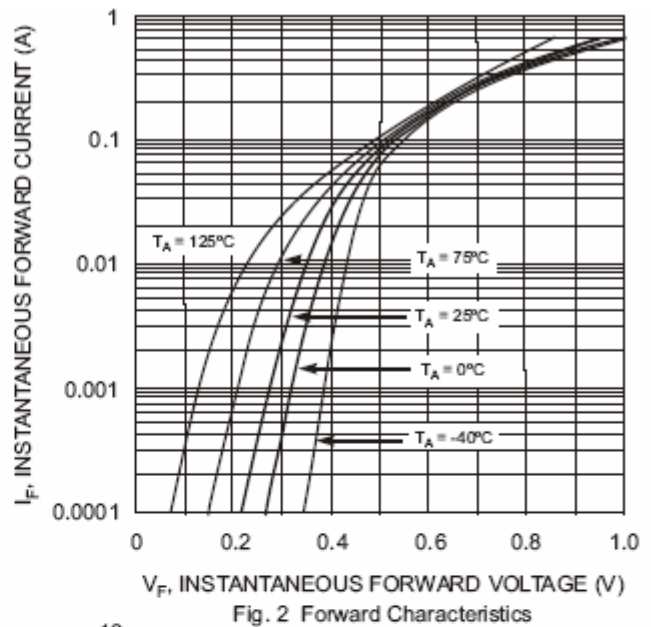
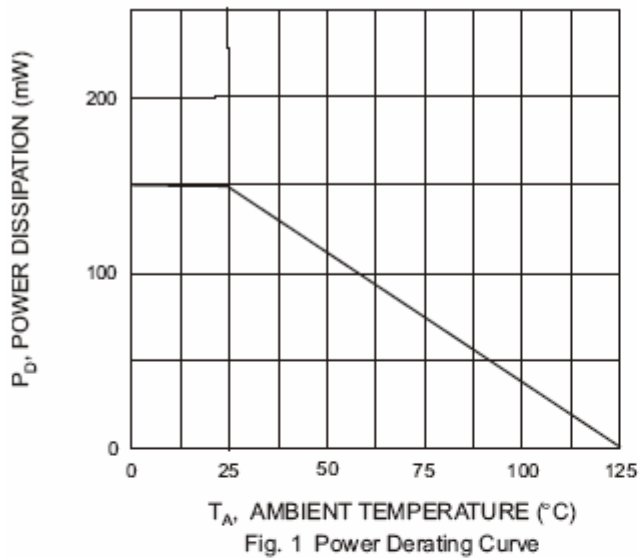
Notes:1. Device mounted on FR-4 PC board with recommended pad layout

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

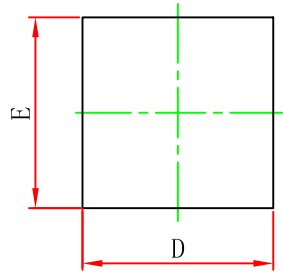
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	V _(BR)	I _R = 100 μ A	30		V
Reverse voltage leakage current	I _R	V _R =25V		2	μ A
Forward voltage	V _F	I _F =0.1mA I _F =1mA I _F =10mA I _F =30mA I _F =100mA		240 320 400 500 1000	mV
Total capacitance	C _T	V _R =1V,f=1MHz		10	pF
Reverse recovery time	t _{rr}	I _F =10mA, I _R =10mA~1mA R _L =100 Ω		5	nS

Typical Characteristics

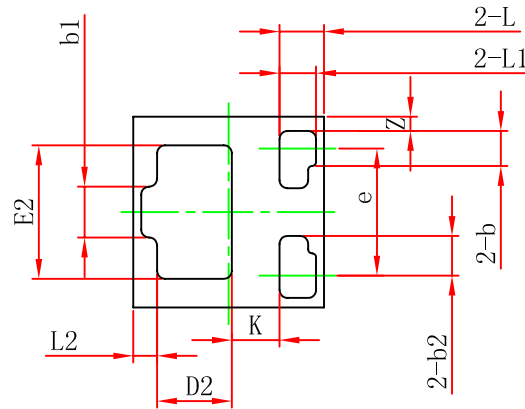
BAT54 M



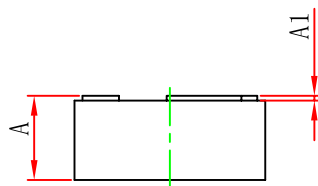
WBFBP-03B(1.2×1.2×0.5) PACKAGE OUTLINE DIMENSIONS



TOP VIEW

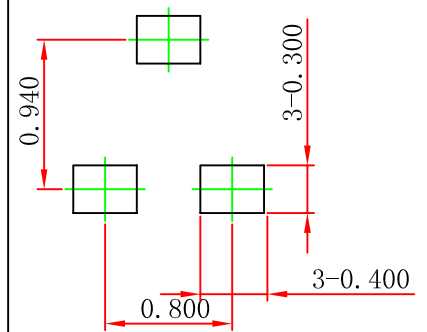


BOTTOM VIEW



SIDE VIEW

(LAND PATTERN RECOMMENDATION)



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
b	0.170	0.270	0.007	0.011
b1	0.270	0.370	0.011	0.015
b2	0.250 REF.		0.010 REF.	
D	1.150	1.250	0.045	0.049
E	1.150	1.250	0.045	0.049
D2	0.470 REF.		0.002 REF.	
E2	0.810 REF.		0.032 REF.	
e	0.800 TYP.		0.032 TYP.	
L	0.280 REF.		0.011 REF.	
L1	0.230 REF.		0.009 REF.	
L2	0.150 REF.		0.006 REF.	
k	0.300 REF.		0.012 REF.	
z	0.090 REF.		0.004 REF.	