



WBFBP-06C Plastic-Encapsulate Diodes

FBAT54SDW

SURFACE MOUNT SCHOTTKY BARRIER DIODE ARRAYS

DESCRIPTION

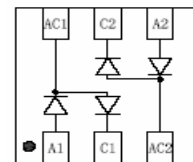
Silicon epitaxial planar
PN Junction Guard Ring for Schottky Diode

FEATURES

- Low Forward Voltage Drop
- Fast Switching

APPLICATION

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



FBAT54SDW
Marking:KL8

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

Parameter	Symbol	Limits	Unit
Peak Repetitive reverse voltage DC Blocking Voltage	V_{RM} V_R	30	V
Average Rectified Output Current	I_O	100	mA
Power Dissipation	P_D	150	mW
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 breakdown voltage	$V_{(BR)}$	$I_R=100\ \mu\text{A}$	30		V
Reverse voltage leakage current	I_R	$V_R=25\text{V}$		2	μA
Forward voltage	V_F	$I_F=0.1\text{mA}$ $I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$		240 320 400 500 1000	mV
Total capacitance	C_T	$V_R=1\text{V}, f=1\text{MHz}$		10	pF
Reverse recovery time	t_{rr}	$I_F=10\text{mA}, I_R=10\text{mA}\sim 1\text{mA}$ $R_L=100\ \Omega$		5	nS

Typical Characteristics

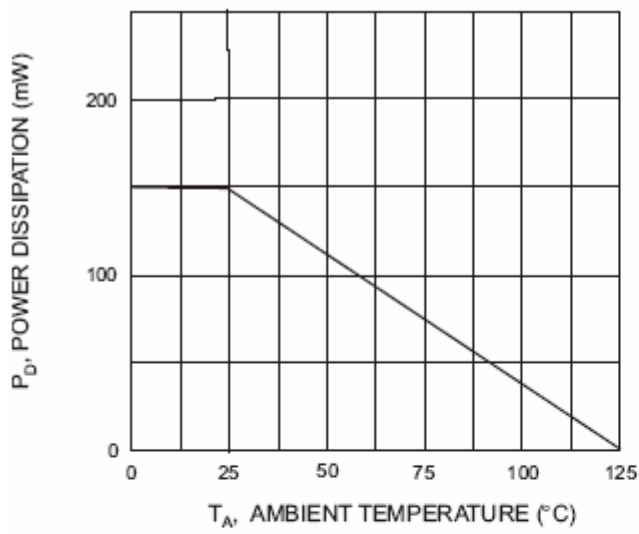


Fig. 1 Power Derating Curve

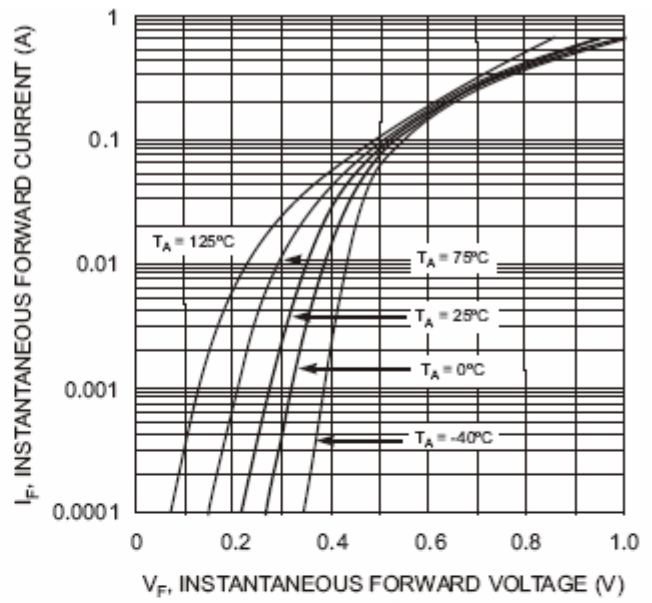


Fig. 2 Forward Characteristics

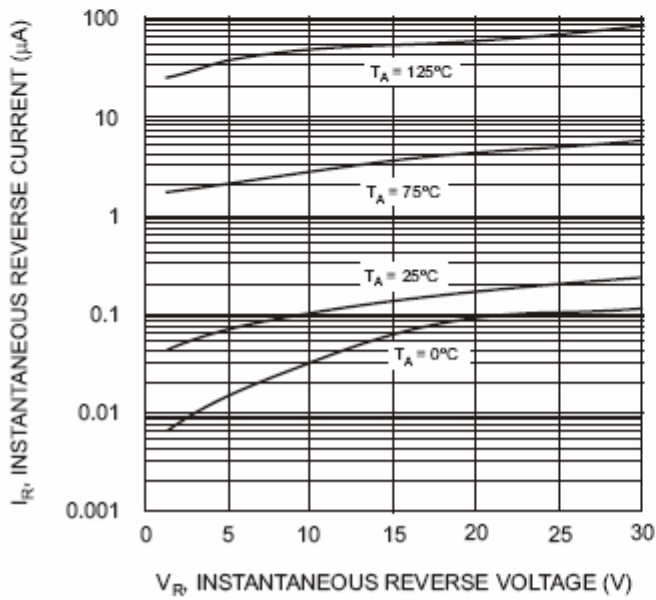


Fig. 3 Typical Reverse Characteristics

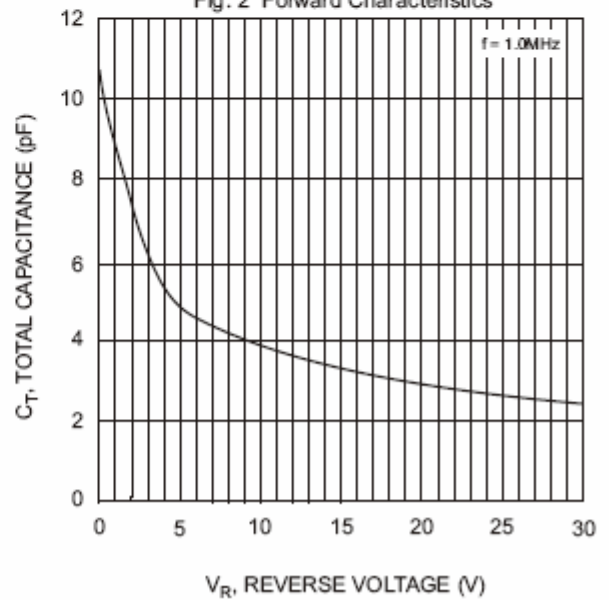
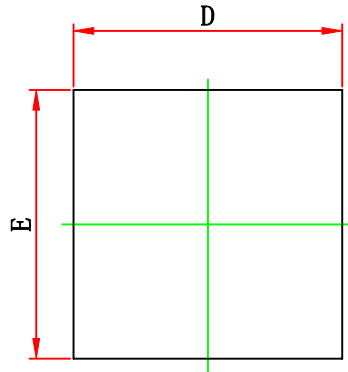


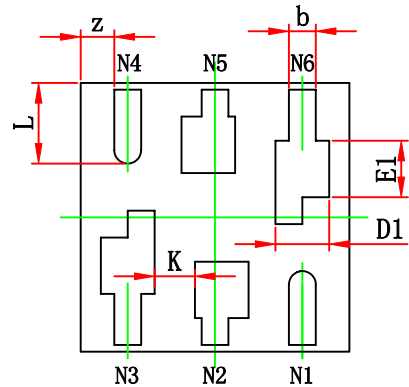
Fig. 4 Typical Capacitance vs. Reverse Voltage



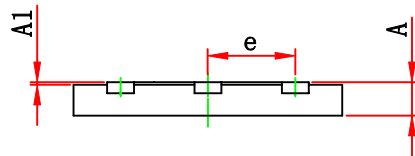
WBFBP-06C(2×2×0.5) PACKAGE OUTLINE DIMENSIONS



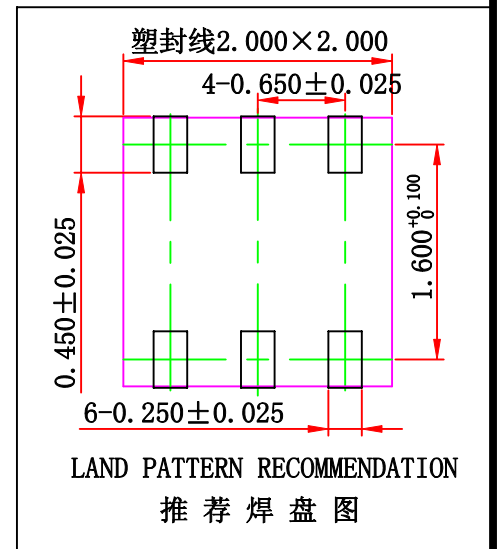
TOP VIEW



BOTTOM VIEW

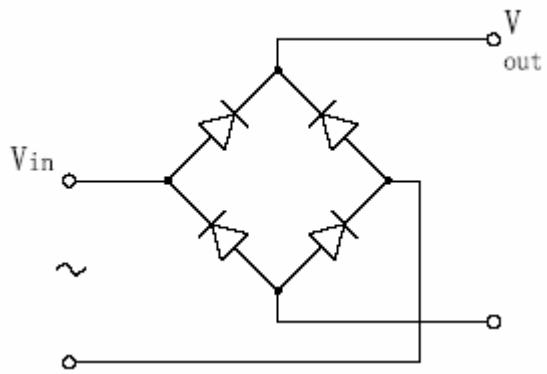


SIDE VIEW



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	0.600 REF.		0.024 REF.	
k	0.300 REF.		0.012 REF.	
z	0.500 REF.		0.020 REF.	

APPLICATION CIRCUITS



Bridge rectifiers