



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

WBFBP-06C Plastic-Encapsulate Diode

FMMBD4448HTW

SURFACE MOUNT SWITCHING DIODE ARRAYS

DESCRIPTION

Silicon epitaxial planar
Switching Diode

FEATURES

- Ultra-Small Surface Mount Package
- Fast Switching Speed
- High Conductance

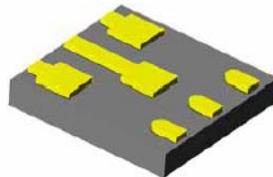
APPLICATION

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

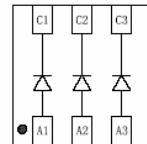
WBFBP-06C

(2x2x0.5)

unit: mm



1



FMMBD4448HTW

Marking:KAA

Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Limits		Unit
Non-Repetitive Peak reverse voltage	V_{RM}	100		V
Peak Repetitive peak reverse voltage	V_{RRM}			
Working Peak Reverse Voltage	V_{RWM}	80		V
DC Blocking Voltage	V_R			
RMS Reverse Voltage	$V_{R(RMS)}$	57		V
Forward Continuous Current	I_{FM}	500		mA
Average Rectified Output Current	I_o	250		mA
Non-Repetitive Peak forward surge current @=1.0μs @=1.0s	I_{FSM}	4.0 2.0		A
Power Dissipation	P_d	150		mW
Thermal Resistance Junction to Ambient	$R_{θJA}$	625		°C/W
Junction temperature	T_J	150		°C
Storage temperature range	T_{STG}	-65 to +150		°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V_R	80			V	$I_R=100 \mu\text{A}$
Forward voltage	V_{F1}	0.62		0.72	V	$I_F=5\text{mA}$
	V_{F2}			0.855	V	$I_F=10\text{mA}$
	V_{F3}			1.0	V	$I_F=100\text{mA}$
	V_{F4}			1.25	V	$I_F=150\text{mA}$
	I_{R1}			0.1	μA	$V_R=70\text{V}$
Reverse current	I_{R2}			25	nA	$V_R=20\text{V}$
	C_T			3.5	pF	$V_R=6\text{V}, f=1\text{MHz}$
Capacitance between terminals	t_{rr}			4	ns	$V_R=6\text{V}, I_F=5\text{mA}$

Typical Characteristics

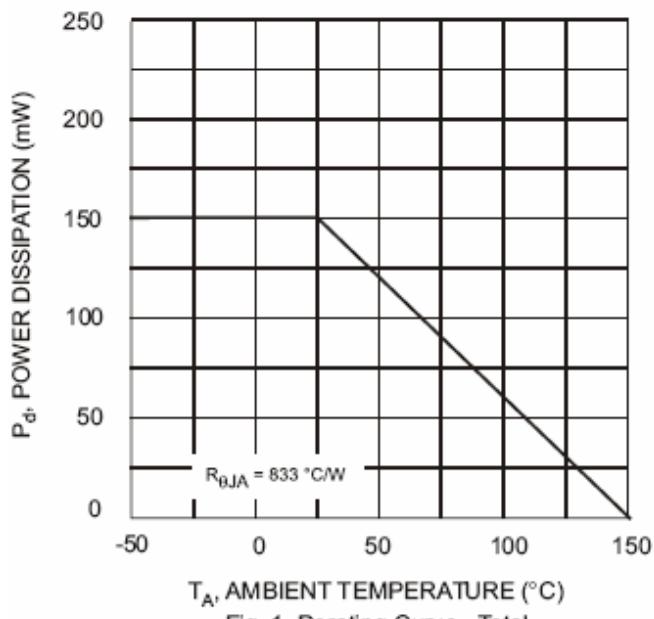


Fig. 1, Derating Curve - Total

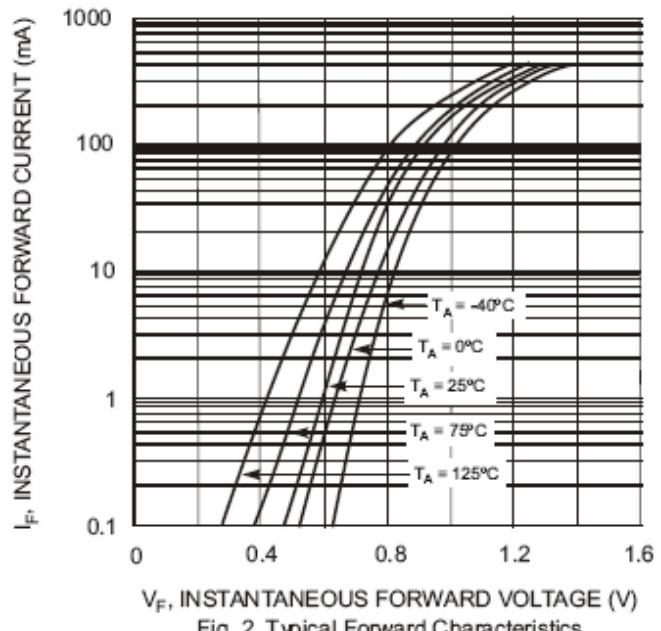


Fig. 2 Typical Forward Characteristics

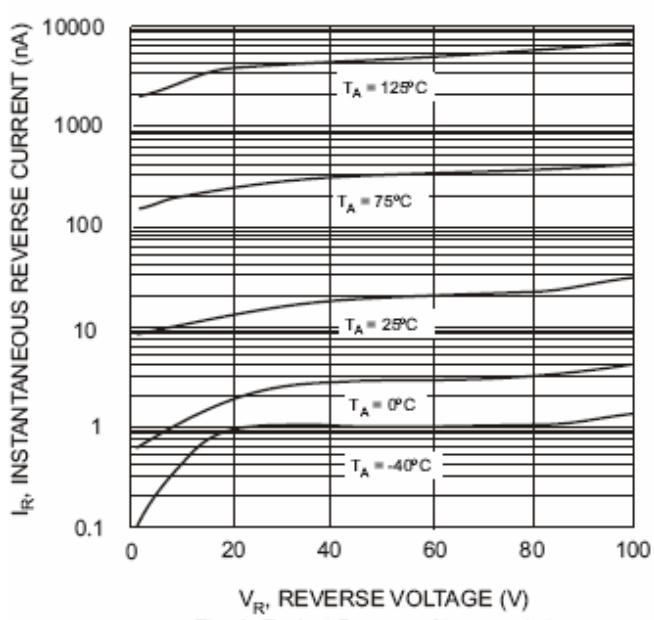


Fig. 3 Typical Reverse Characteristics

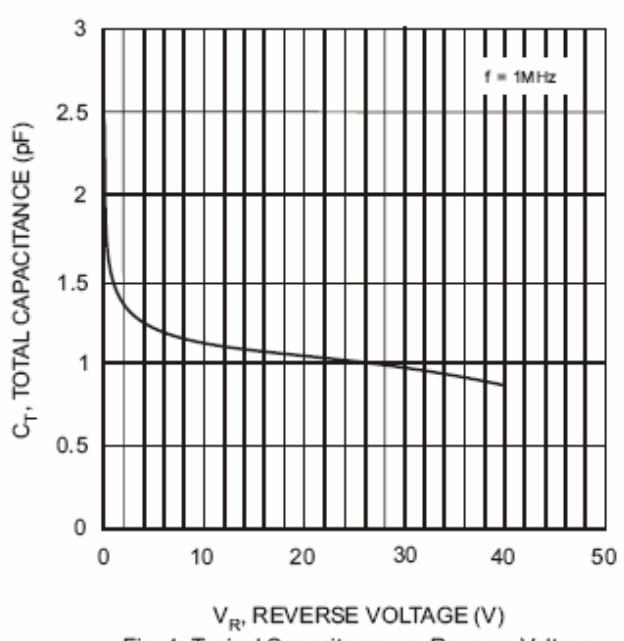
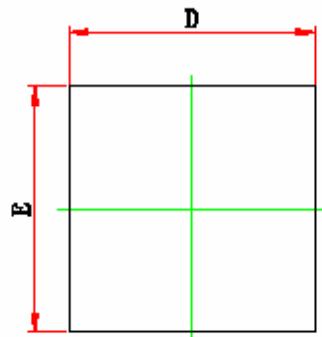


Fig. 4 Typical Capacitance vs. Reverse Voltage

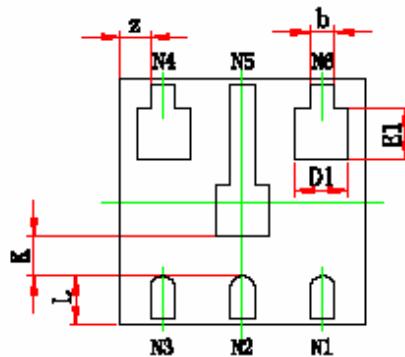


江苏长电科技股份有限公司
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD.

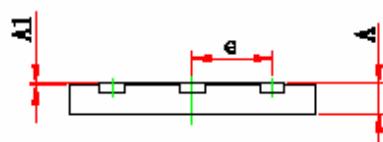
WBFBP-06C(2×2×0.5) PACKAGE OUTLINE DIMENSIONS



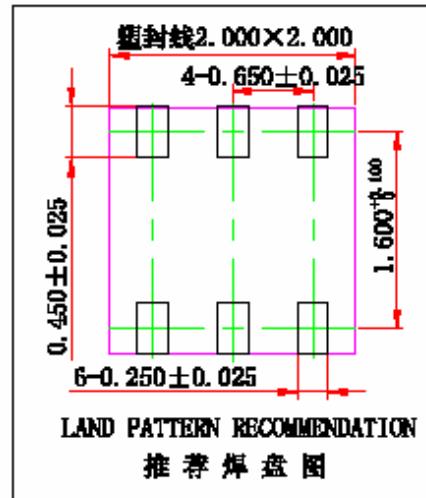
TOP VIEW



BOTTOM VIEW

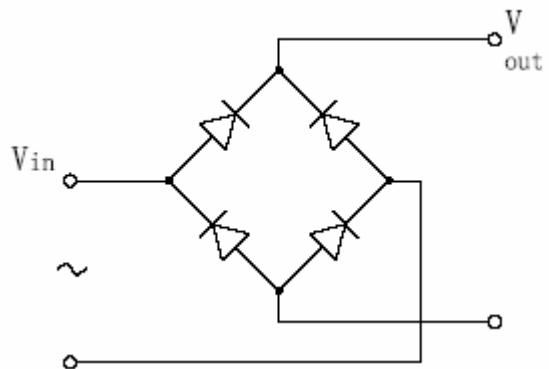


SIDE VIEW



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