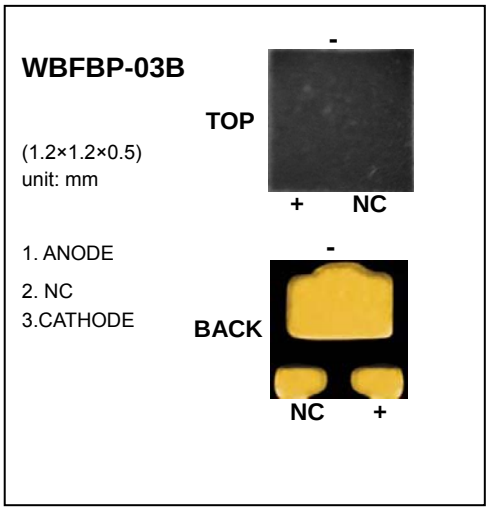
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

WBFBP-03B Plastic-Encapsulate DIODE

MMBD4148M SWITCHING DIODE



DESCRIPTION

Epitaxial planar Silicon diode

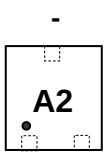
FEATURES

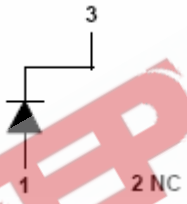
Fast Switching Speed
Ultra-Small Surface Mount Package
For General Purpose Switching Applications
High Conductance
Lead Free Product

APPLICATION

High Conductance Ultra Fast Diode
For portable equipment:(i.e. Mobile phone,MP3, MD,CD-ROM, DVD-ROM, Note book PC, etc.)

MARKING: **A2**





Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25℃

Parameter	Symbol	Limite	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	100	V
Peak Repetitive Peak reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Peak forward surge current @=1.0μs @=1.0s	I_{FSM}	2.0 1.0	A
Power Dissipation	P_D	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	℃/W
Junction temperature	T_j	125	℃
Storage temperature	T_{STG}	-65~+150	℃

Electrical Ratings @T_A=25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit.	Conditions
Forward voltage	V_{F1}			0.715	V	I_F=1mA
	V_{F2}			0.855	V	I_F=10mA
	V_{F3}			1.0	V	I_F=50mA
	V_{F4}			1.25	V	I_F=150mA
Reverse current	I_{R1}			1	μA	V_R=75V
	I_{R2}			25	nA	V_R=20V
Capacitance between terminals	C_T			2	pF	V_R=0V,f=1MHz
Reverse Recovery Time	t_{rr}			4	ns	I_F=I_R=10mA Irr=0.1XI_R,R_L=100Ω

Typical Characteristics MMBD4148M

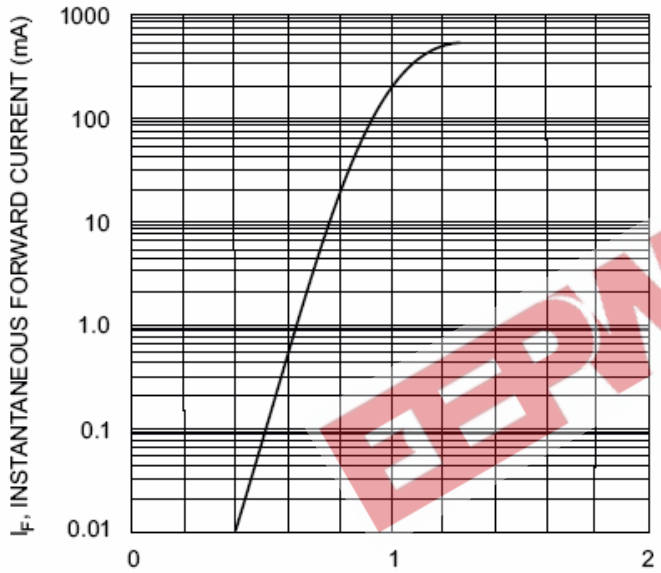


Fig. 1 Forward Characteristics

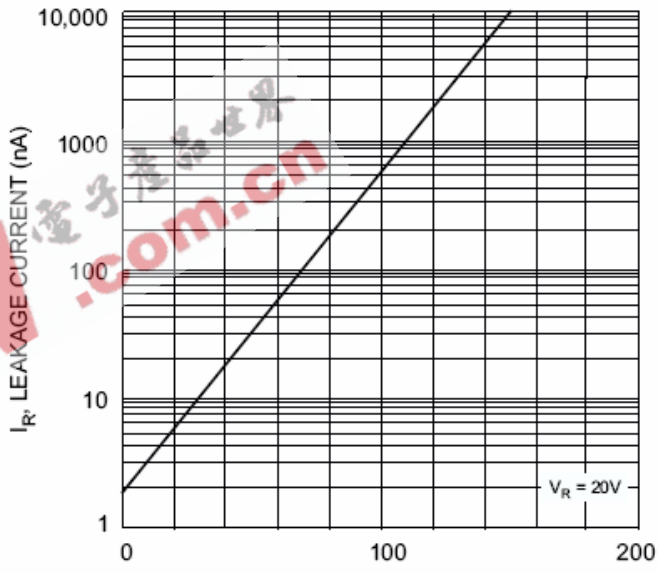
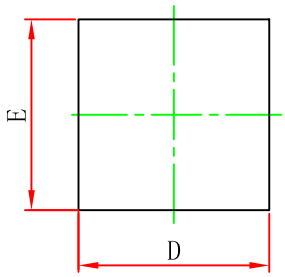
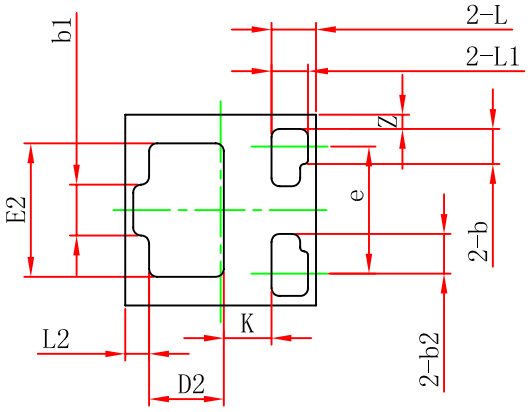


Fig. 2 Leakage Current vs Junction Temperature

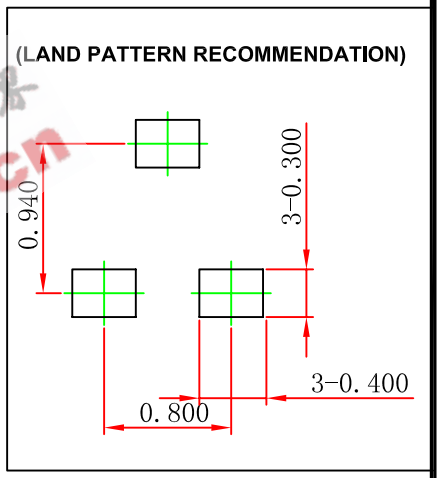
WBFBP-03B(1.2×1.2×0.5) PACKAGE OUTLINE DIMENSIONS

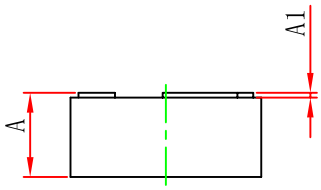


TOP VIEW



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	0.010	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.	