



## WBFBP-03A Plastic-Encapsulate Diode

**DAN222E** SWITCHING DIODE

### DESCRIPTION

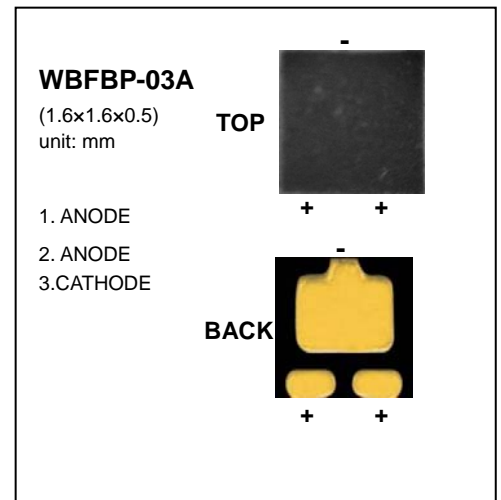
Epitaxial planar Silicon diode

### FEATURES:

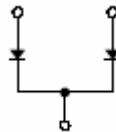
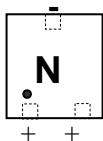
High speed. ( $t_{rr}=1.5ns$  Typ.)  
 Suitable for high packing density layout  
 High reliability.

### APPLICATION

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



**MARKING: N**



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

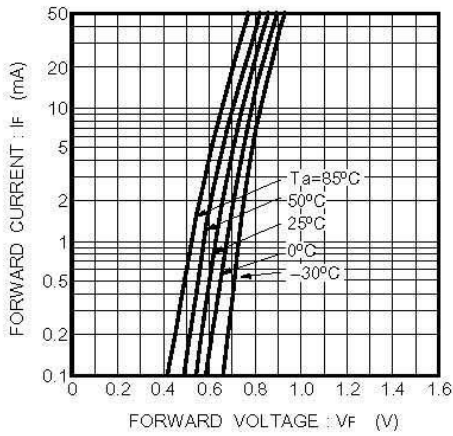
Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	80	V
DC reverse voltage	$V_R$	80	V
Maximum (peak) forward current	$I_{FM}$	300	mA
Average forward current	$I_O$	100	mA
Power dissipation	$P_D$	150	mW
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature	$T_{stg}$	-55-150	$^\circ C$

### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ C$ unless otherwise specified)

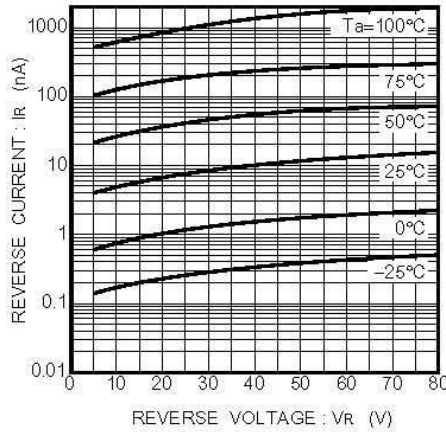
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	80		V
Reverse voltage leakage current	$I_R$	$V_R=70V$		0.1	$\mu A$
Forward voltage	$V_F$	$I_F=100mA$		1.2	V
Diode capacitance	$C_D$	$V_R=6V, f=1MHz$		3.5	pF
Reverse recovery time	$t_{rr}$	$V_R=6V, I_F=5mA$		4	ns

# Typical Characteristics

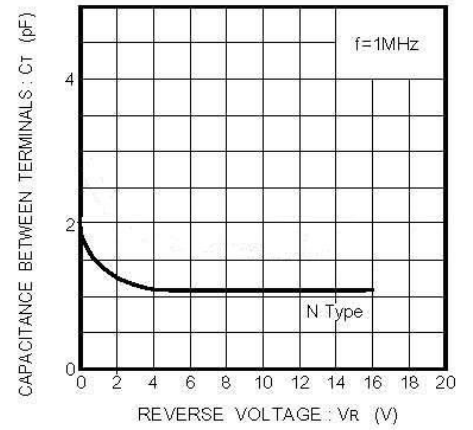
# DAN222E



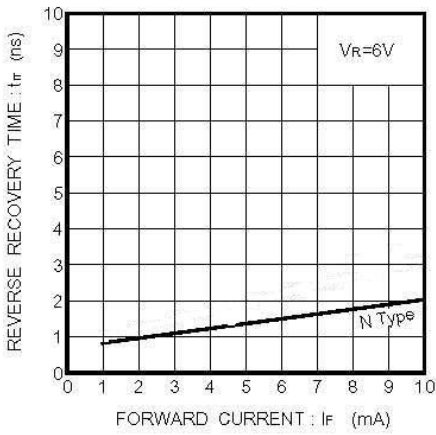
Forward characteristics



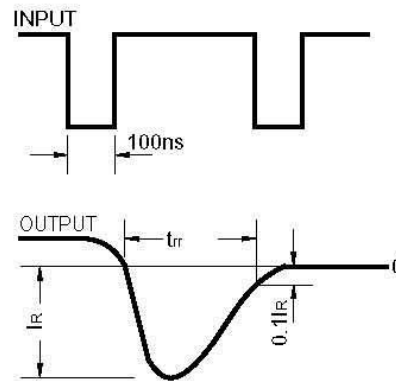
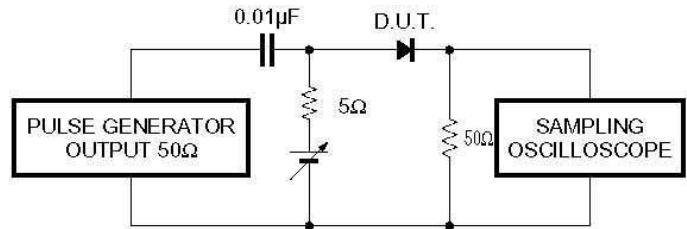
Reverse characteristics



Capacitance between terminals characteristics



Reverse recovery time



Reverse recovery time ( $t_r$ ) measurement circuit

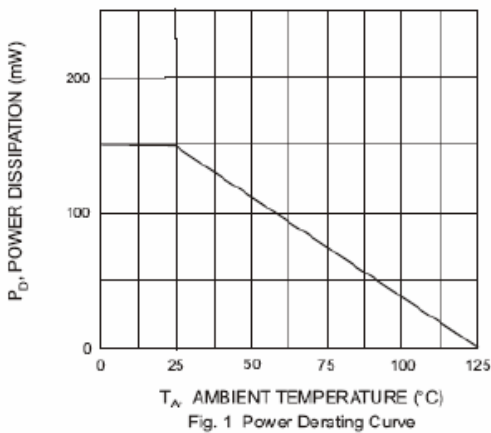
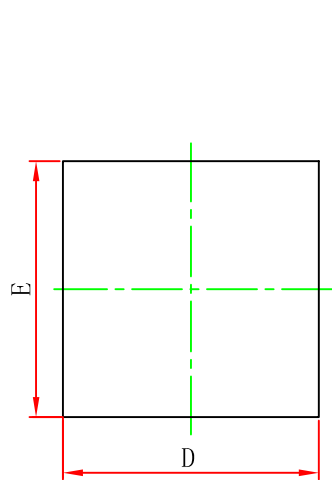
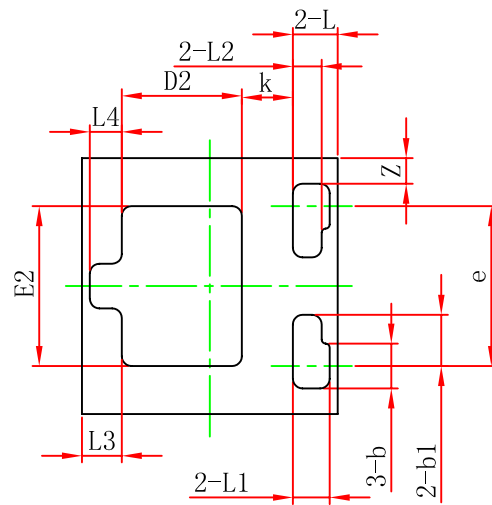


Fig. 1 Power Derating Curve

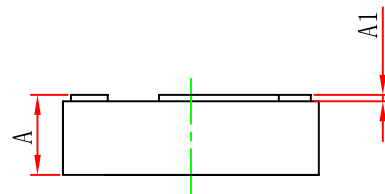
# WBFBP-03A(1.6×1.6×0.5) PACKAGE OUTLINE DIMENSIONS



TOP VIEW

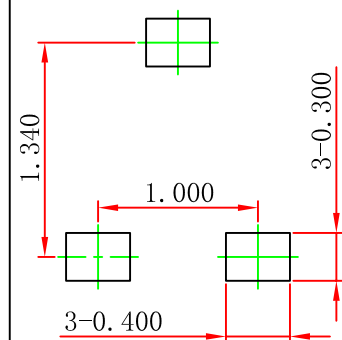


BOTTOM VIEW



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	0.230	0.330	0.009	0.013
b1	0.320 REF.		0.013 REF.	
D	1.550	1.650	0.061	0.065
E	1.550	1.650	0.061	0.065
D2	0.750 REF.		0.030 REF.	
E2	1.000 REF.		0.040 REF.	
e	1.000 TYP.		0.040 TYP.	
L	0.280 REF.		0.011 REF.	
L1	0.230 REF.		0.009 REF.	
L2	0.180 REF.		0.007 REF.	
L3	0.250 REF.		0.010 REF.	
L4	0.200 REF.		0.008 REF.	
k	0.320 REF.		0.013 REF.	
z	0.160 REF.		0.006 REF.	