



## WBFBP-02C-A Plastic-Encapsulate Diodes

### DS521-30Y1 SCHOTTKY BARRIER DIODE

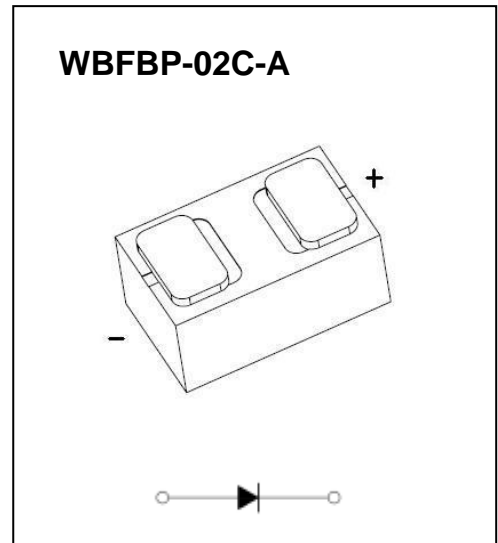
#### FEATURE

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability

#### APPLICATION

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

#### MARKING



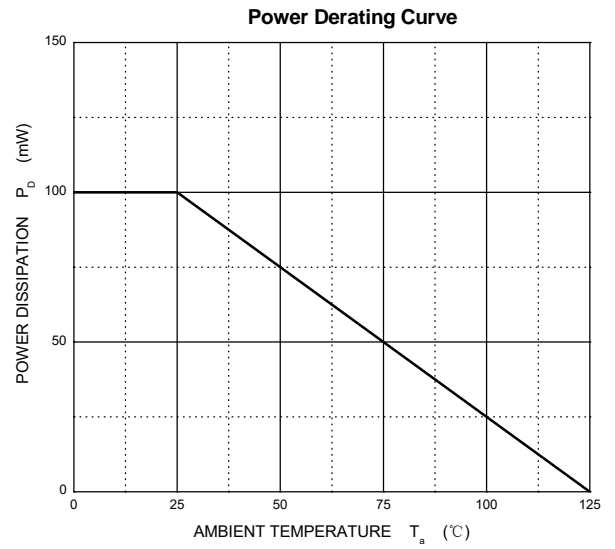
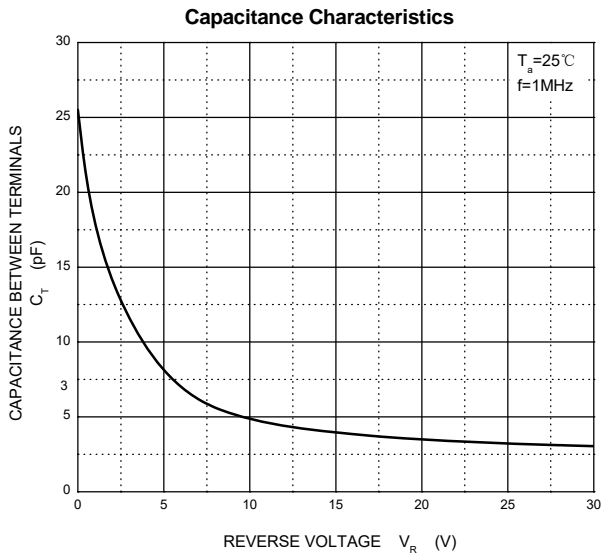
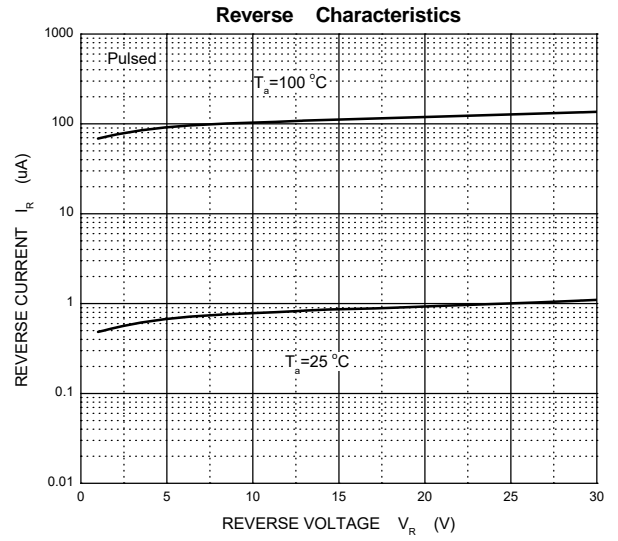
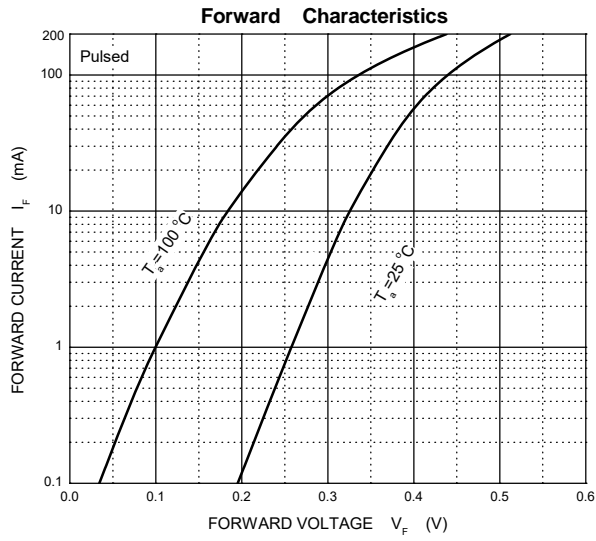
#### MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Limit	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage	30	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	21	V
$I_o$	Average Rectified Output Current	200	mA
$I_{FSM}$	Non-Repetitive Peak Forward Surge Current@ t=8.3ms	0.5	A
$P_d$	Power Dissipation	100	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	1000	$^{\circ}\text{C}/\text{W}$
$T_J$	Operating Junction Temperature Range	-40 ~ +125	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-55 ~ +150	$^{\circ}\text{C}$

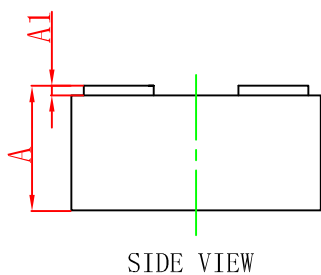
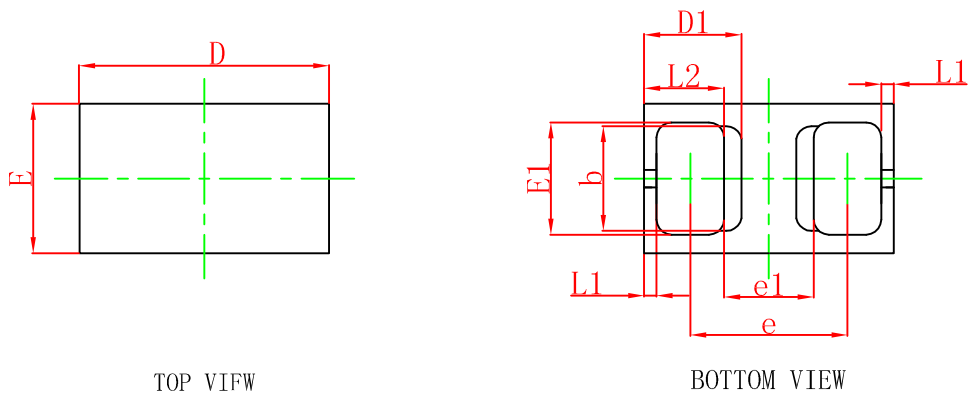
#### ELECTRICAL CHARACTERISTICS ( $T_a = 25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	30			V
Reverse current	$I_R$	$V_R=10\text{V}$			10	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=10\text{mA}$			0.35	V
		$I_F=100\text{mA}$			0.50	V
		$I_F=200\text{mA}$		0.55	0.60	V

# Typical Characteristics

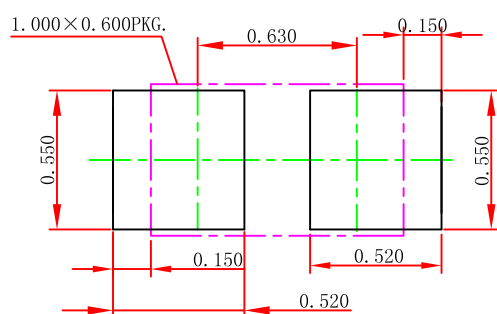


## WBFBP-02C-A Package Outline Dimensions



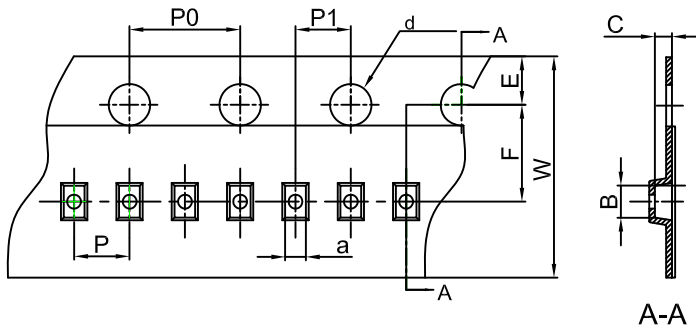
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.450	0.550	0.018	0.022
A1	0.010	0.090	0.000	0.004
D	0.950	1.050	0.037	0.041
E	0.550	0.650	0.022	0.026
D1	0.390REF.		0.015REF.	
E1	0.400	0.500	0.016	0.020
b	0.420REF.		0.017REF.	
e	0.580	0.680	0.023	0.027
e1	0.360REF.		0.014REF.	
L1	0.050REF.		0.002REF.	
L2	0.270	0.370	0.011	0.015

## WBFBP-02C-A Suggested Pad Layout



- Note:**
1. Controlling dimension: in millimeters.
  2. General tolerance:  $\pm 0.050$ mm.
  3. The pad layout is for reference purposes only.

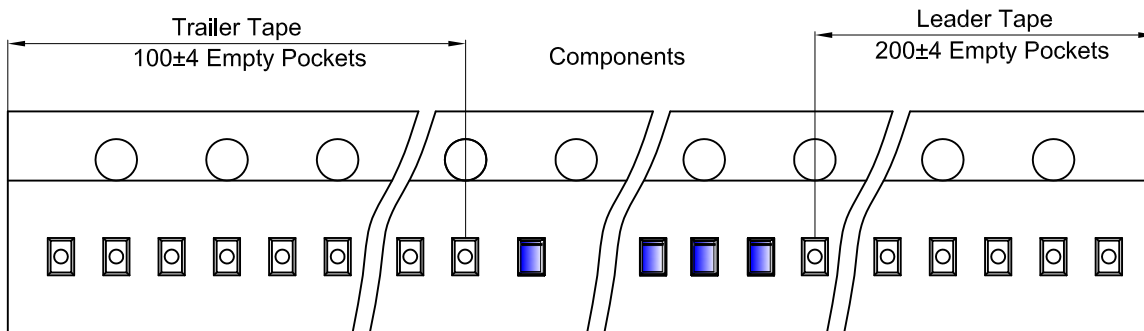
**DFN/FBP(1.0×0.6) Embossed Carrier Tape**



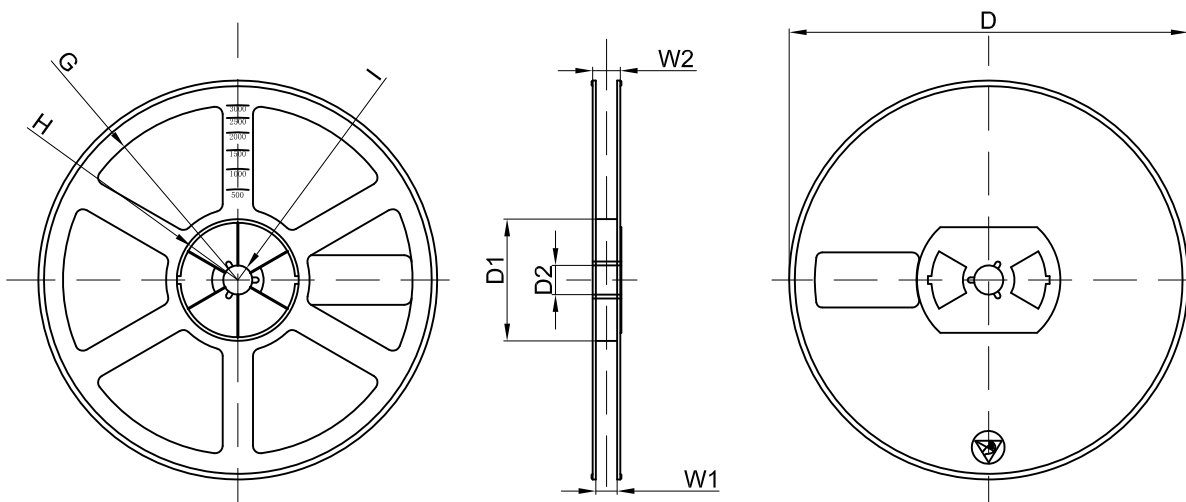
**Packaging Description:**  
**DFN/FBP(1.0×0.6)** parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 10,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter											
Pkg type	a	B	C	d	E	F	P0	P	P1	W	
<b>DFN/FBP(1.0×0.6)</b>	0.66	1.15	0.66	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00	

**DFN/FBP(1.0×0.6) Tape Leader and Trailer**



**DFN/FBP(1.0×0.6) Reel**



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
10000 pcs	7 inch	150,000 pcs	203×203×195	600,000 pcs	438×438×220	