

DFNWB3.0×3.0-4L Plastic-Encapsulate Diodes

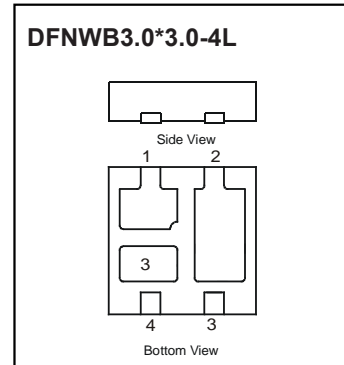
SBR1040BP SCHOTTKY BARRIER BRIDGE

FEATURES

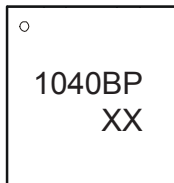
- Very Small SMD Package
- Low Forward Voltage Drop

APPLICATIONS

- Low Voltage Rectification
- High Efficiency DC/DC Conversion
- Switch Mode Power Supply
- Low Power Consumption Applications



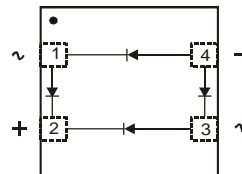
MARKING



Top View

1040BP: Device Code
XX: Date Code

DEVICE SCHEMATIC



Top View

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{RRM}	Peak repetitive reverse voltage	40	V
V _{RWM}	Working peak reverse voltage		
V _R	DC blocking voltage		
V _{R(RMS)}	RMS reverse voltage	28	V
I _O	Average rectified output current	1.0	A
I _{FSM}	Non-Repetitive peak forward surge current (8.3ms half sine wave)	8.0	A
P _D	Power dissipation	1.5	W
R _{θJA}	Thermal resistance from junction to ambient	215	°C/W
T _j	Junction temperature	150	°C
T _{stg}	Storage temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	I _R = 1mA	40			V
Reverse current	I _R	V _R =40V T _j =25°C		5	10	uA
Forward voltage	V _F	I _F =0.2A T _j =25°C		0.39		V
		I _F =0.4A T _j =25°C		0.43		V
		I _F =1A T _j =25°C		0.53	0.60	V

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

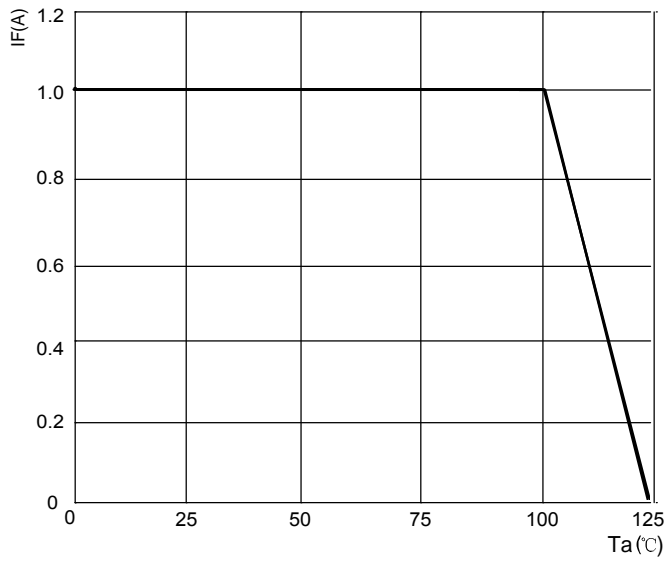


FIG.2: TYPICAL FORWARD CHARACTERISTICS

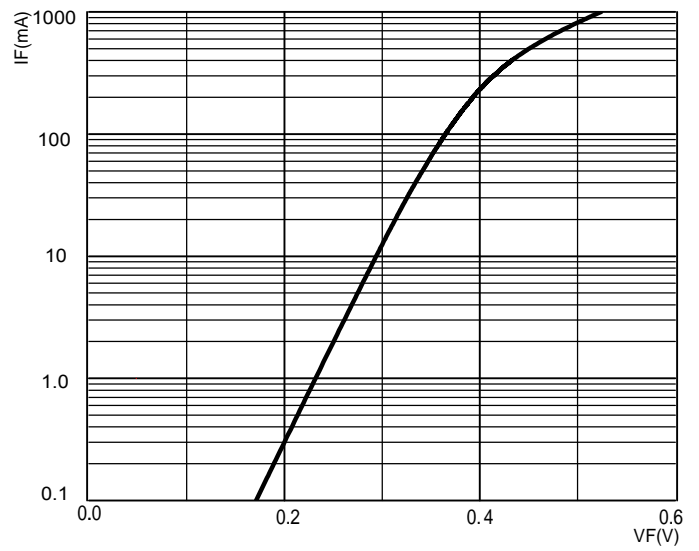
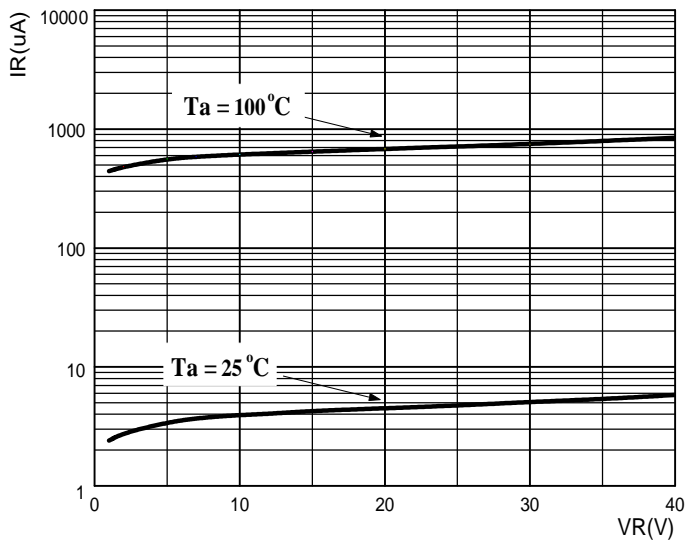
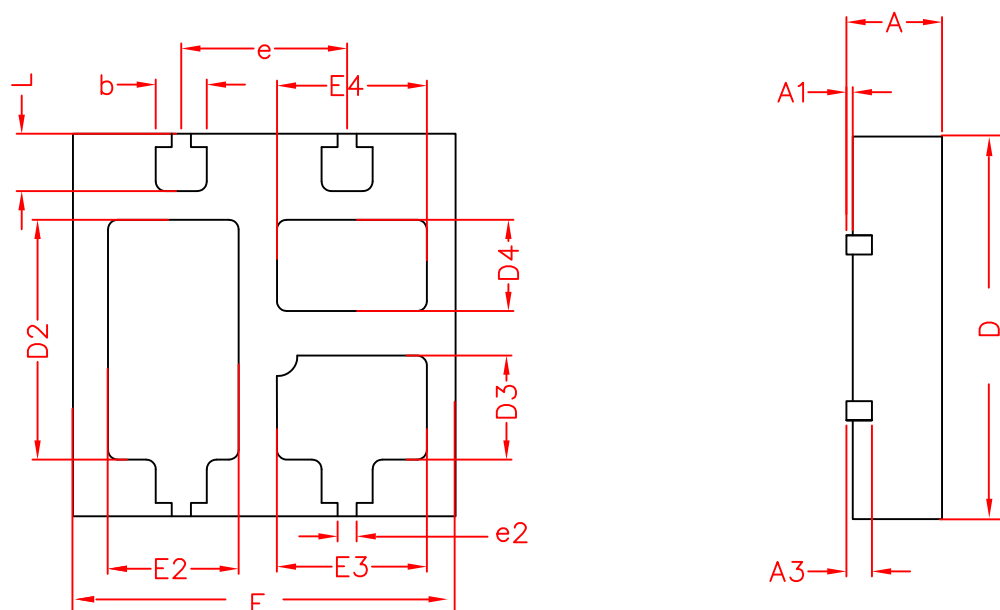


FIG.3: TYPICAL REVERSE CHARACTERISTICS



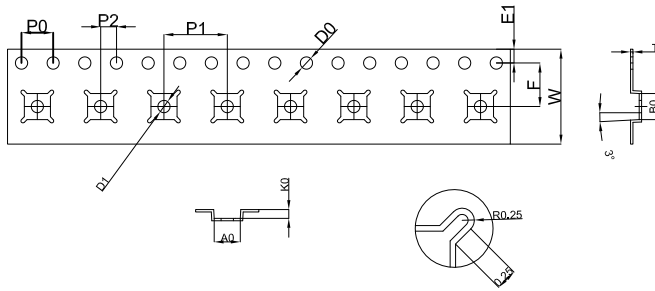
DFNWB3.0*3.0-4L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.800	0.028	0.031
A2	0.000	0.050	0.000	0.002
A3	0.200TYP		0.008TYP	
D	2.950	3.050	0.116	0.120
E	2.950	3.050	0.116	0.120
D2	1.780	1.980	0.070	0.078
E2	0.925	1.125	0.036	0.044
D3	0.715	0.915	0.028	0.036
E3	1.125	1.225	0.044	0.048
D4	0.665	0.765	0.026	0.030
E4	1.075	1.275	0.042	0.050
b	0.350	0.450	0.014	0.018
L	0.400	0.500	0.016	0.020
e	1.300TYP		0.051TYP	
e2	0.150TYP		0.006TYP	

DFNWB3.0*3.0-4L Tape and Reel

DFNWB3.0*3.0-4L Embossed Carrier Tape

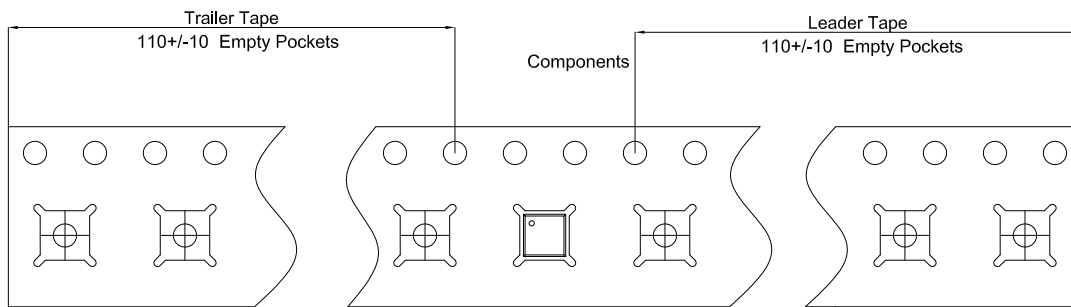


Packaging Description:

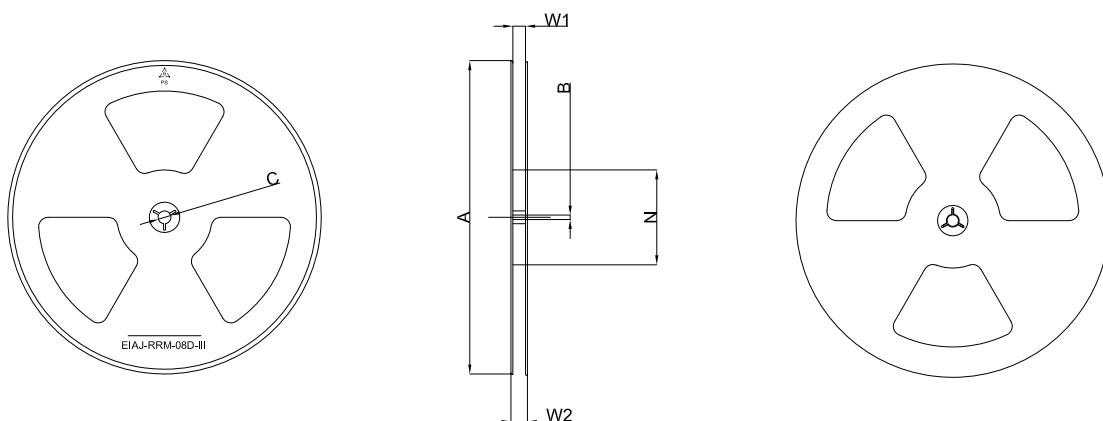
DFNWB3.0*3.0-4L parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 5,000 units per 13" or 33.0 cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).
ALL DIM IN mm

Dimensions are in millimeter											
A0	B0	K0	P0	P1	P2	E1	F	D0	D1	T	W
3.30	3.30	1.10	4.00	8.00	2.00	1.75	5.50	Φ1.55	Φ1.55	0.30	12.00

DFNWB3.0*3.0-4L Tape Leader and Trailer



DFNWB3.0*3.0-4L Reel



Dimensions are in millimeter						
Reel Option	A	B	C	W1	W2	N
13"Dia	Φ330	4.7	Φ13.5	13.4	17.4	100

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
5000 pcs	13 inch	10000 pcs	355*338*50	50000 pcs	380*280*385	