

DFN1610-2L Plastic-Encapsulate Diodes

DS160-40 SCHOTTKY BARRIER DIODE

DFN1610-2L



FEATURES

- Low forward voltage drop
- Small power mold type
- Low I_R
- Small current rectification

APPLICATIONS

- Low voltage rectification
- High efficiency DC-to-DC conversion
- Switch mode power supply
- LED backlight for mobile application
- Low power consumption applications
- Ultra high-speed switching
- Reverse polarity protection

MARKING:



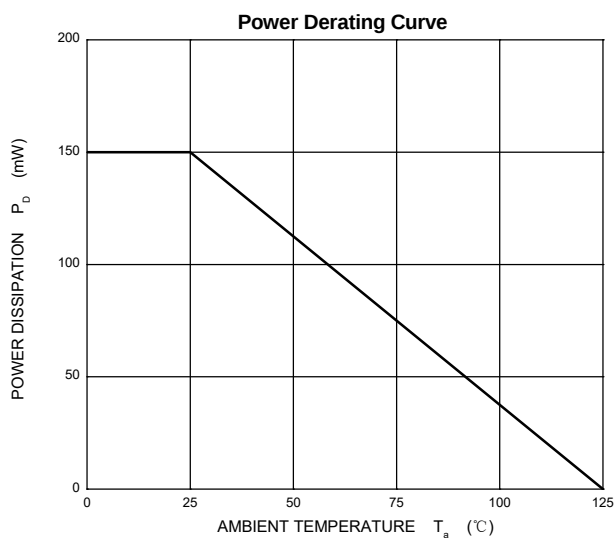
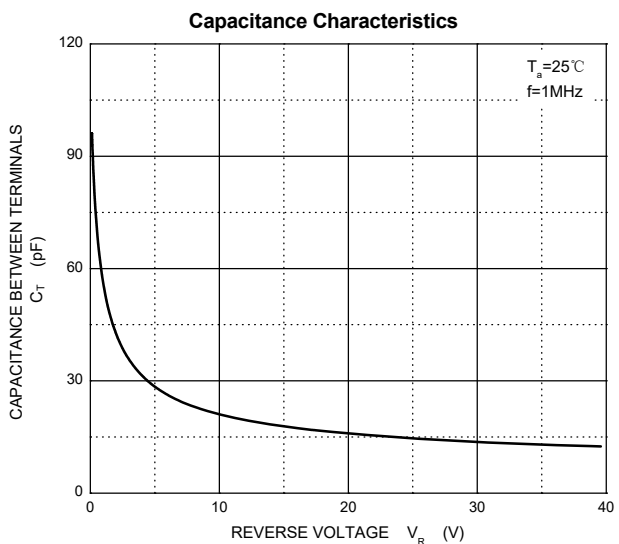
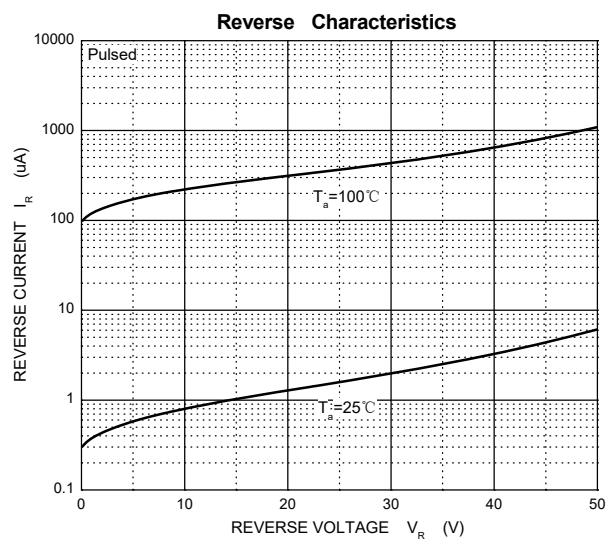
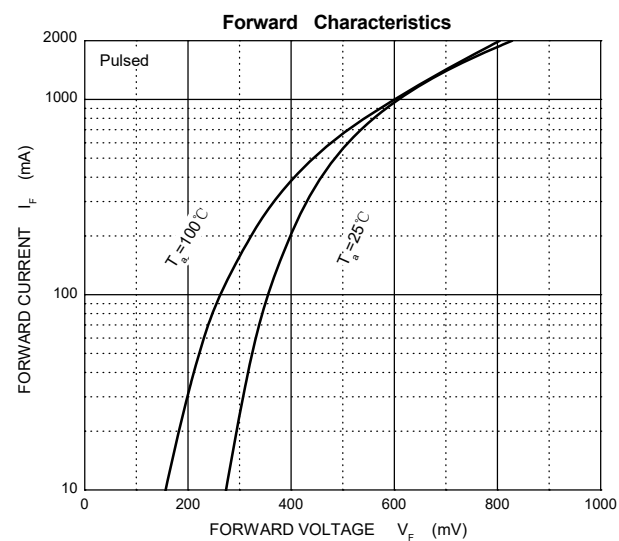
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

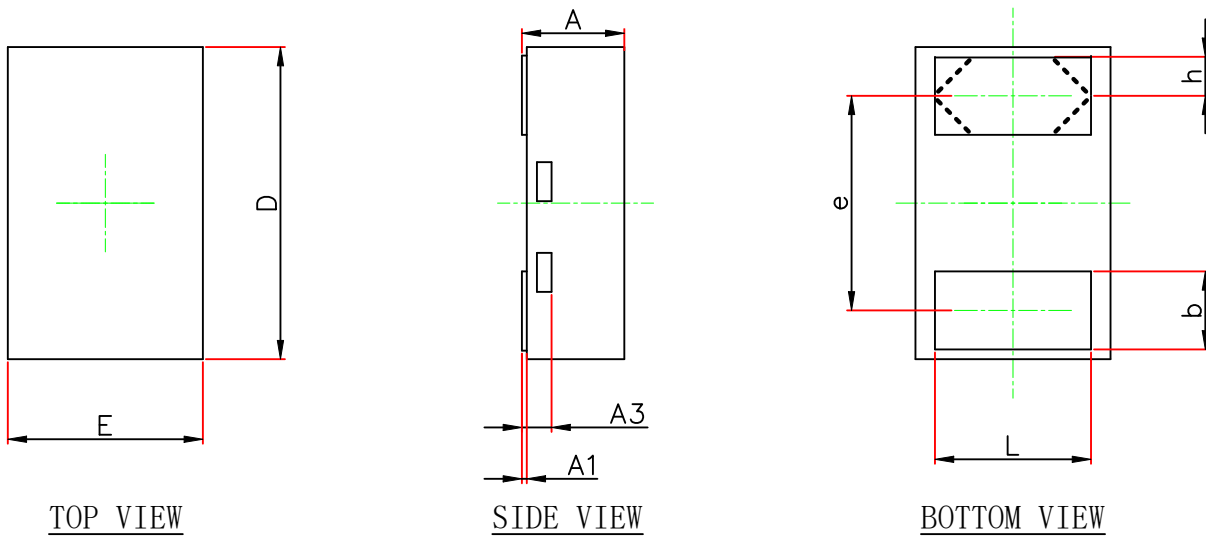
Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	40	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_O	Average Rectified Output Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	5	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	667	$^\circ\text{C/W}$
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)

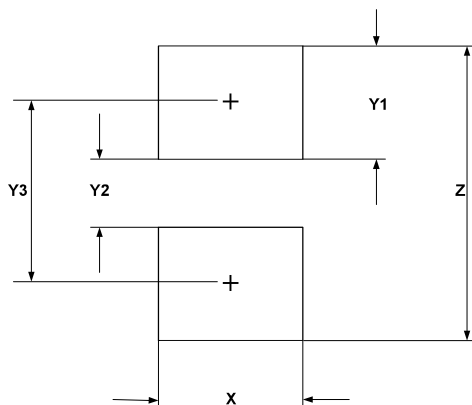
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	40			V
Reverse current	I_R	$V_R=40\text{V}$			50	μA
Forward voltage	V_F	$I_F=0.7\text{A}$			0.55	V
Diode capacitance	C_d	$V_R=1\text{V}; f=1\text{MHz}$		50		pF
		$V_R=10\text{V}; f=1\text{MHz}$		20		pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}; R_L=100\Omega;$ $I_{R(meas)}=1\text{mA}$		15		ns

Typical Characteristics



DFNWB1610-2L Package Outline Drawing

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.450	0.550	0.018	0.022
A1	0.000	0.050	0.000	0.002
A3	0.100	0.200	0.004	0.008
D	1.550	1.650	0.061	0.065
E	0.950	1.050	0.037	0.041
b	0.350	0.450	0.014	0.018
e	1.100TYP.		0.043TYP.	
L	0.750	0.850	0.030	0.033
h	0.150	0.250	0.006	0.010

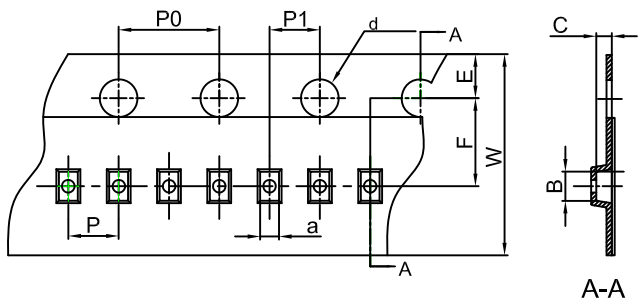
Suggested Land Pattern

SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X	1.00	0.040
Y1	0.62	0.025
Y2	0.60	0.024
Y3	1.22	0.049
Z	1.85	0.074

NOTICE

JSCJ reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.

DFN1610-2L Embossed Carrier Tape

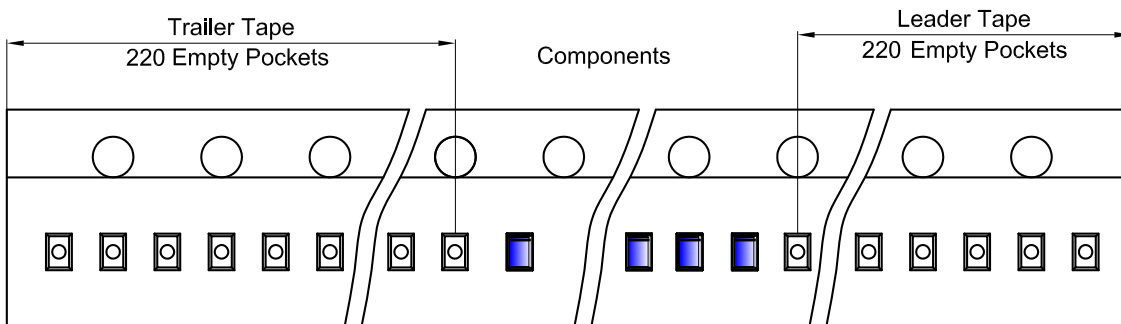


Packaging Description:

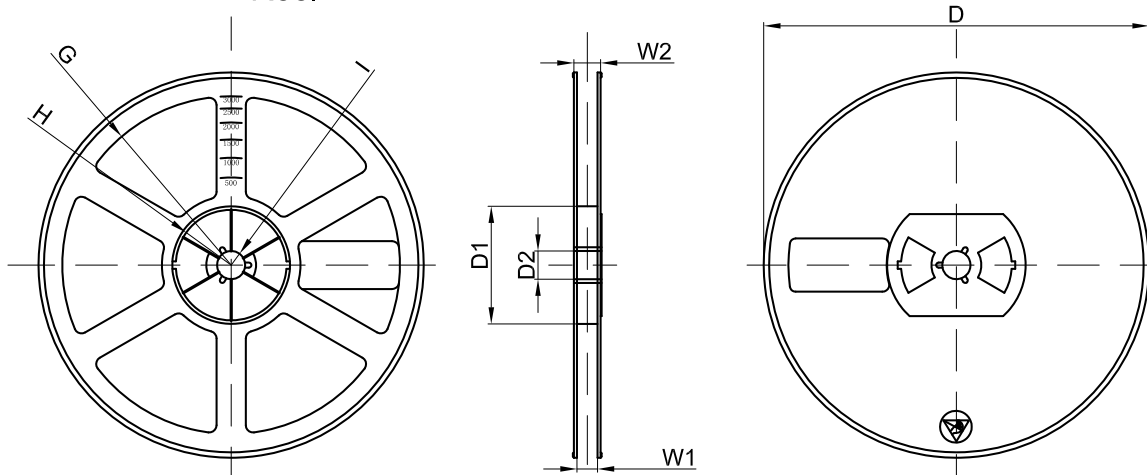
DFN1610-2L parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts 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
DFN1610-2L	1.10	1.72	0.68	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00

DFN1610-2L Tape Leader and Trailer



DFN1610-2L Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.50	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)
5,000pcs	7 inch	75,000 pcs	220×220×210	300,000 pcs	450×450×240	