

DFN1006 Plastic-Encapsulate Diodes

Schottky barrier Diode

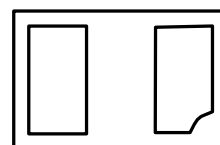
DFN1006-2

Feature

- Small surface mounting type
- low forward voltage
- High reliability

Application

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



MARKING



Equivalent Circuit



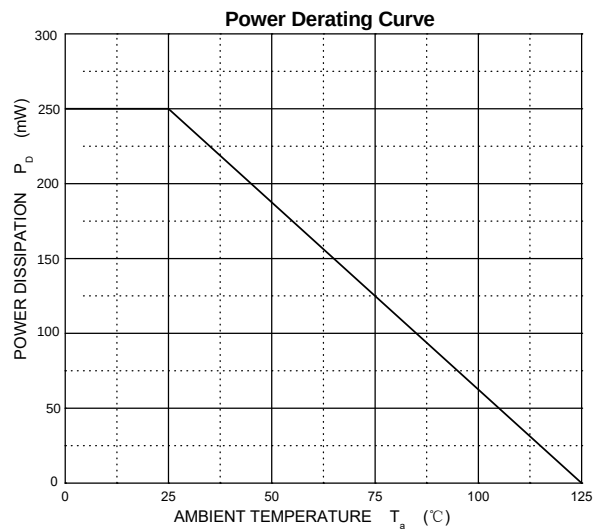
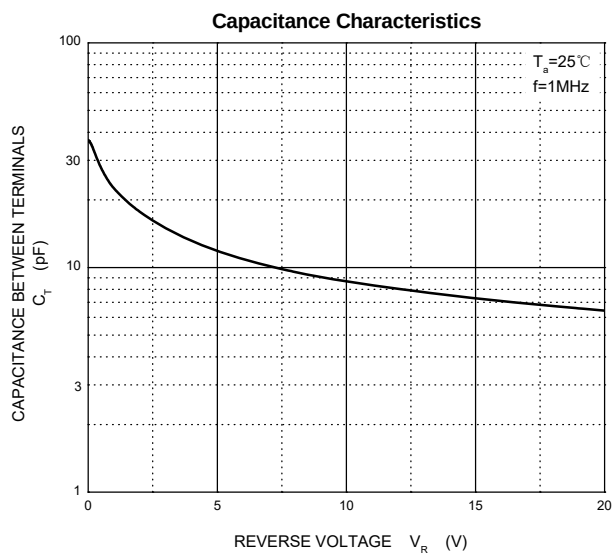
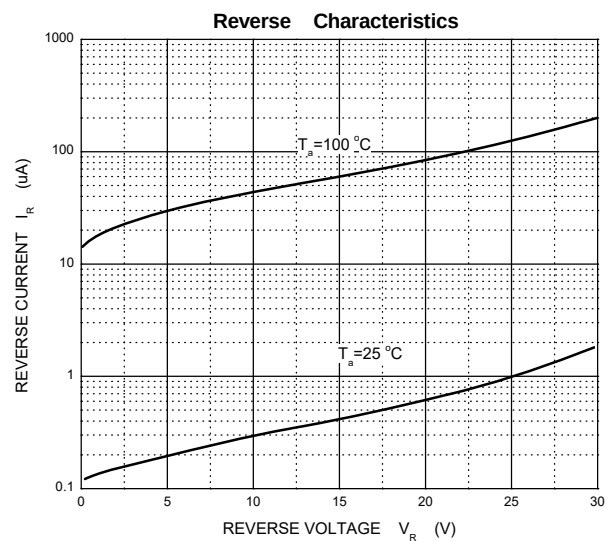
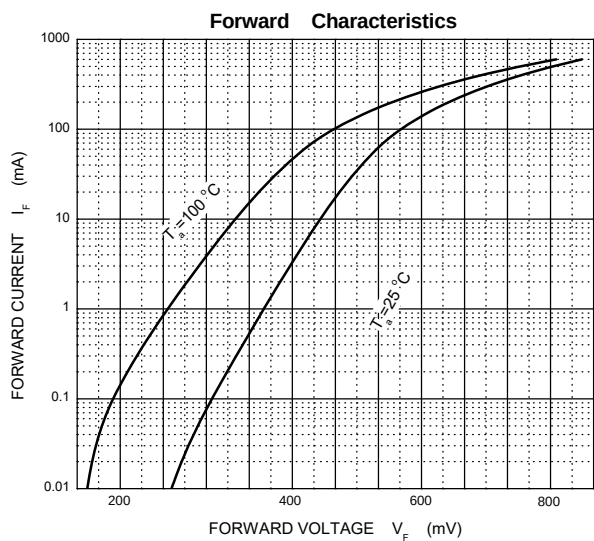
ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	40	V
RMS reverse Voltage	$V_{R(RMS)}$	28	V
Mean rectifying current	I_O	0.1	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	1	A
Power Dissipation	P_D	250	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	400	$^{\circ}\text{C/W}$
Operating Junction Temperature Range	T_J	$-40 \sim +125$	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	$-55 \sim +150$	$^{\circ}\text{C}$

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

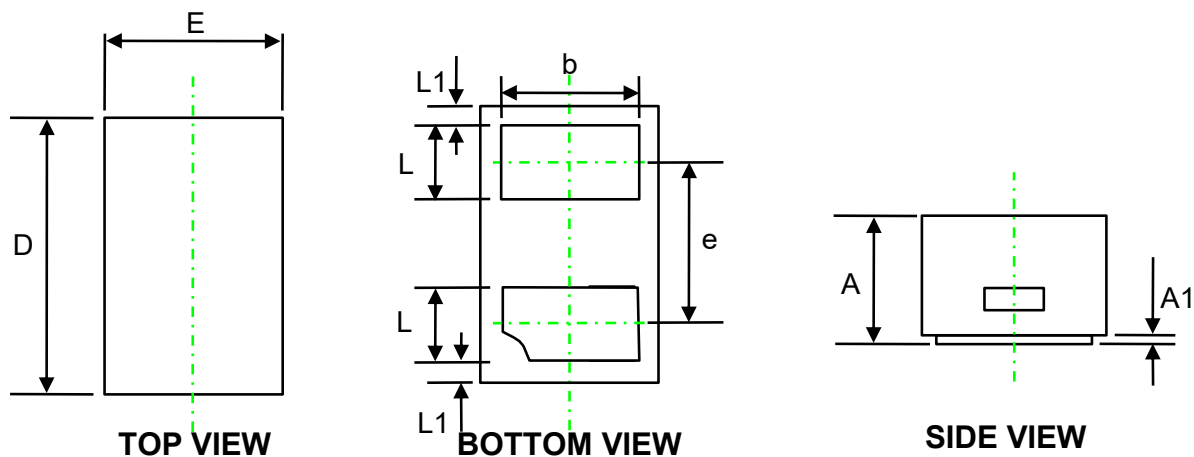
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	V_{BR}	$I_R = 100\mu\text{A}$	40			V
Forward voltage	V_F	$I_F = 10\text{mA}$		0.38	0.48	V
		$I_F = 100\text{mA}$		0.58	0.75	V
Reverse current	I_R	$V_R = 25\text{V}$			1.0	μA
		$V_R = 40\text{V}$		5	10	μA

Typical Characteristics



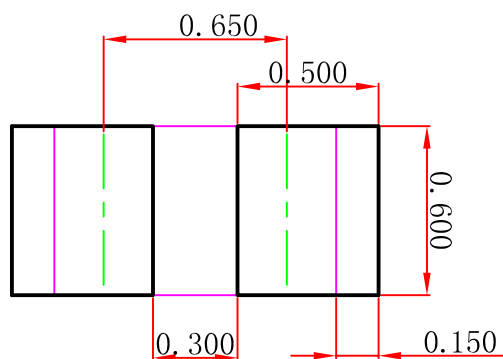
PACKAGE OUTLINE AND PAD LAYOUT INFORMATION

DFN1006-2 Package Outline Dimensions



Symbol	Dimensions In Millimeters (mm)		
	Min.	Typ.	Max.
A	0.44	0.47	0.50
A1	0.00	0.03	0.05
D	0.95	1.00	1.08
E	0.55	0.60	0.68
b	0.40	0.50	0.60
e	-	0.65	-
L	0.20	0.25	0.30
L1	0.05 REF.		

DFN1006-2 Suggested Pad Layout

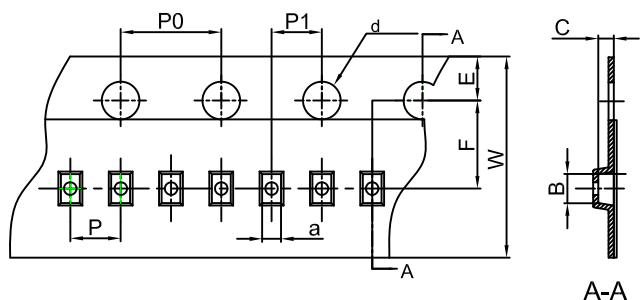


Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.050 mm.
3. The pad layout is for reference purposes only.

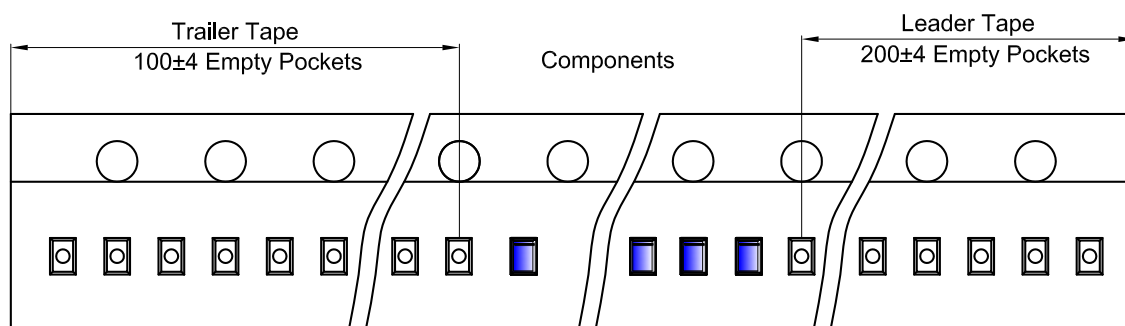
TAPE AND REEL INFORMATION

DFN1006-2 Embossed Carrier Tape

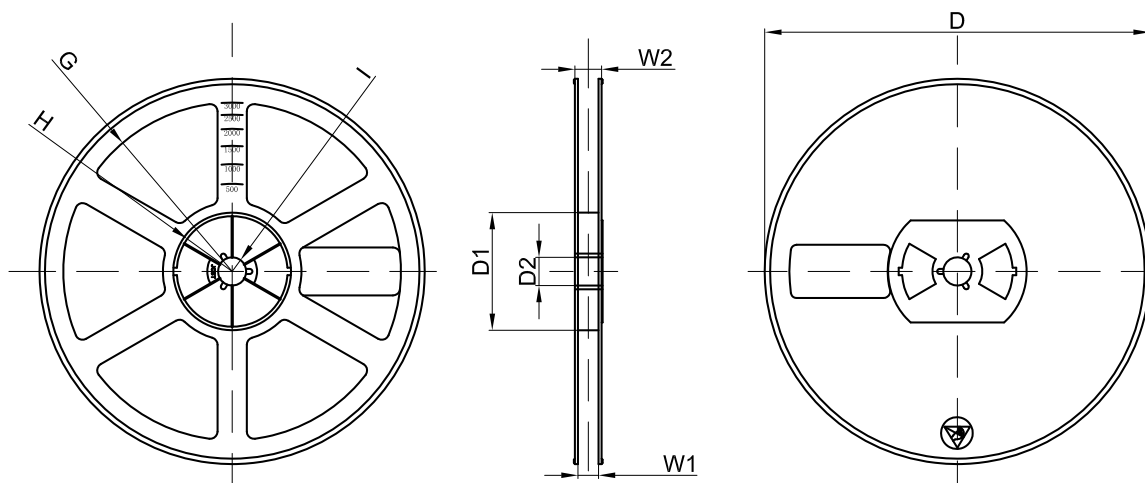


Dimensions are in millimeter										
Pkg type	a	B	C	d	E	F	P0	P	P1	W
DFN/FBP(1.0×0.6×0.5)	0.66	1.15	0.66	Ø1.50	1.75	3.50	4.00	2.00	2.00	8.00

DFN1006-2 Tape Leader and Trailer



DFN1006-2 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	