



Product Summary

V _{(BR)DSS}	R _{DS(on)TYP}	I _D
-20V	68mΩ@-4.5V	-2.3A
	95mΩ@-2.5V	
20V	32mΩ@4.5V	3.5A
	49mΩ@2.5V	

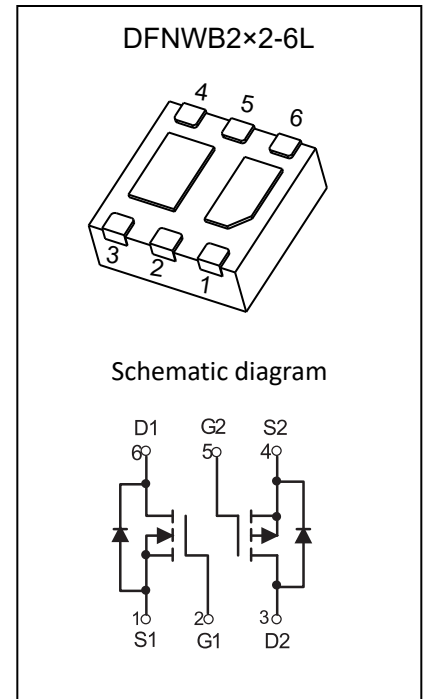
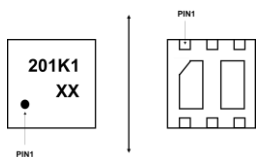
Feature

- TrenchFET Power MOSFET
- High Density Cell Design for Low R_{DS(ON)}
- Voltage Controlled Small Signal Switch

Application

- Load Switch for Portable Devices
- DC/DC Converter

MARKING:



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

Parameter	Symbol	Value	Unit
P-MOSFET			
Drain-Source Voltage	V _{DS}	-20	V
Gate-Source Voltage	V _{GS}	±12	V
Continuous Drain Current	I _D	-2.3	A
Pulsed Drain Current ⁽¹⁾	I _{DM}	-9	A
Power Dissipation	P _D	0.75	W
N-MOSFET			
Drain-Source Voltage	V _{DS}	20	V
Gate-Source Voltage	V _{GS}	±12	V
Continuous Drain Current	I _D	3.5	A
Pulsed Drain Current ⁽¹⁾	I _{DM}	14	A
Power Dissipation	P _D	0.75	W
Temperature and Thermal Resistance			
Thermal Resistance from Junction to Ambient ⁽²⁾	R _{θJA}	167	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55~ +150	°C

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

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Static Characteristics						
Drain-source breakdown voltage	$V_{(BR)DSS}$	$V_{GS} = 0V, I_D = -250\mu A$	-20			V
Zero gate voltage drain current	I_{DSS}	$V_{DS} = -16V, V_{GS} = 0V$			-1	μA
Gate-body leakage current	I_{GSS}	$V_{GS} = \pm 8V, V_{DS} = 0V$			± 100	nA
Gate threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -250\mu A$	-0.4	-0.7	-1.0	V
Drain-source on-resistance ⁽³⁾	$R_{DS(on)}$	$V_{GS} = -4.5V, I_D = -2.8A$		68	90	m Ω
		$V_{GS} = -2.5V, I_D = -2.0A$		95	125	
Forward transconductance	g_{FS}	$V_{DS} = -5V, I_D = -2.0A$	3			S
Diode forward voltage ⁽³⁾	V_{DS}	$I_S = -0.7A, V_{GS} = 0V$			-1.2	V
Dynamic characteristics⁽⁴⁾						
Input Capacitance	C_{iss}	$V_{DS} = -10V, V_{GS} = 0V, f = 1MHz$		363		pF
Output Capacitance	C_{oss}			70		
Reverse Transfer Capacitance	C_{rss}			60		
Total gate charge	Q_g	$V_{DS} = -10V, V_{GS} = -2.5V, I_D = -3A$		3.2		nC
Gate-source charge	Q_{gs}			0.6		
Gate-drain charge	Q_{gd}			1.2		
Switching Characteristics⁽⁴⁾						
Turn-on delay time	$t_{d(on)}$	$V_{DD} = -10V, V_{GEN} = -4.5V, I_D = -1A$ $R_L = 10\Omega, R_{GEN} = 1\Omega$		9		nS
Turn-on rise time	t_r			33		
Turn-off delay time	$t_{d(off)}$			29		
Turn-off fall time	t_f			9		

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

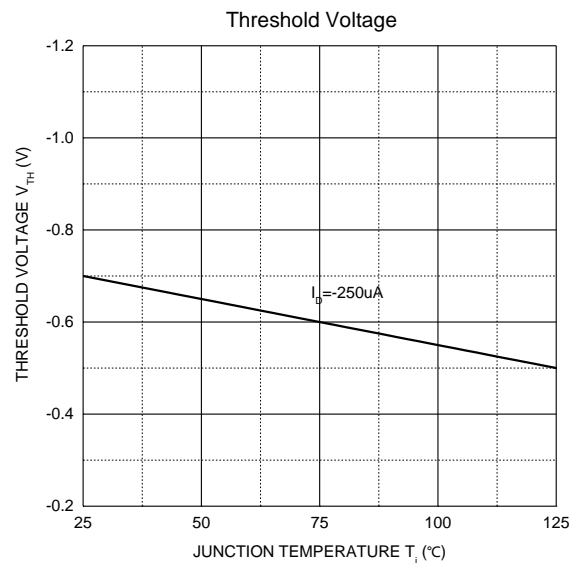
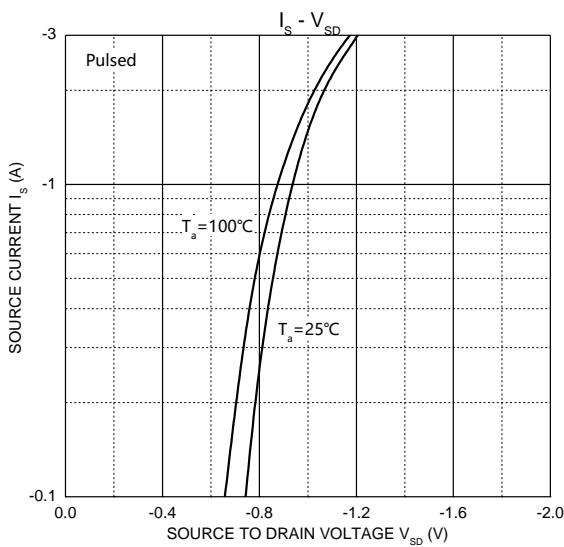
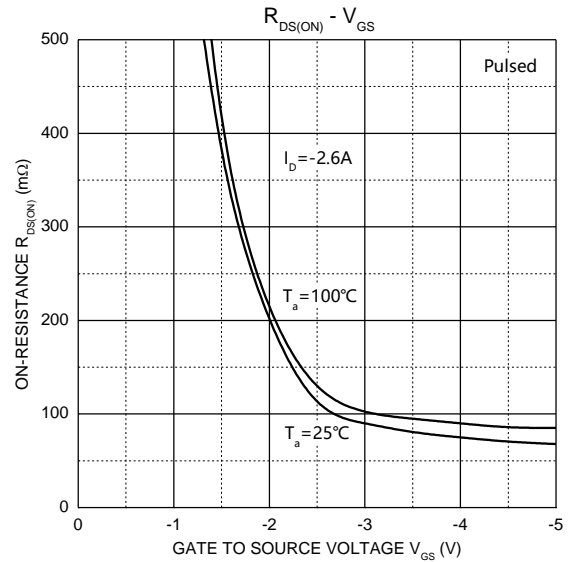
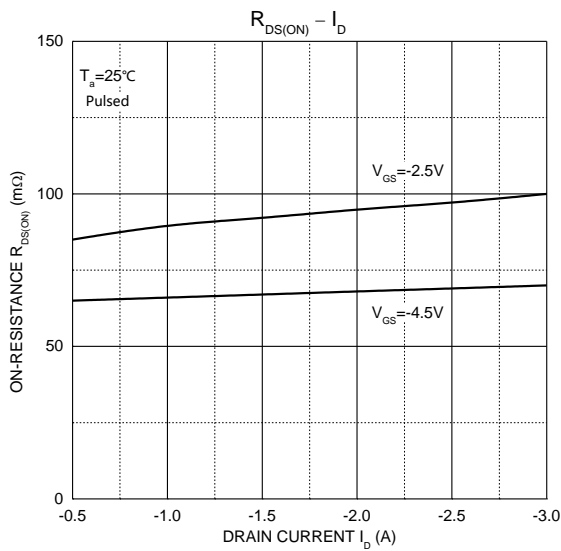
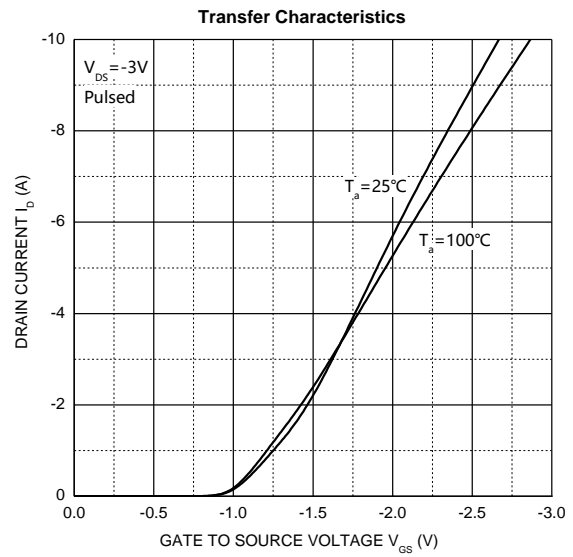
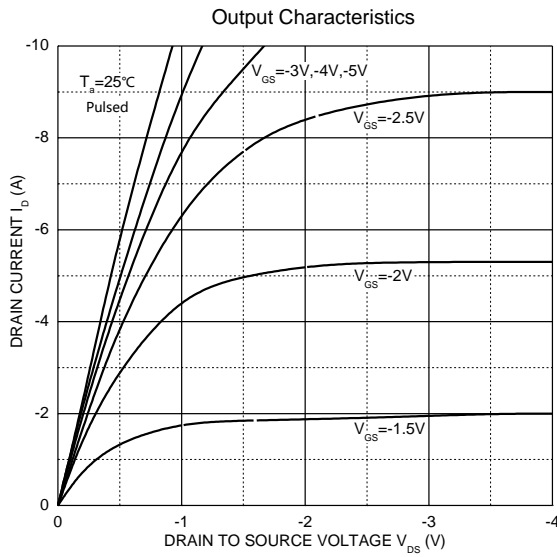
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Static Characteristics						
Drain-source breakdown voltage	$V_{(BR)DSS}$	$V_{GS} = 0V, I_D = 250\mu A$	20			V
Zero gate voltage drain current	I_{DSS}	$V_{DS} = 16V, V_{GS} = 0V$			1	μA
Gate-body leakage current	I_{GSS}	$V_{GS} = \pm 8V, V_{DS} = 0V$			± 100	nA
Gate threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 250\mu A$	0.6	0.8	1.2	V
Drain-source on-resistance ⁽³⁾	$R_{DS(on)}$	$V_{GS} = 4.5V, I_D = 3.6A$		32	42	m Ω
		$V_{GS} = 2.5V, I_D = 3.1A$		49	65	
Forward transconductance	g_{FS}	$V_{DS} = 5V, I_D = 3.6A$		8		S
Diode Forward voltage ⁽³⁾	V_{DS}	$V_{GS} = 0V, I_S = 0.94A$			1.2	V
Dynamic characteristics⁽⁴⁾						
Input Capacitance	C_{iss}	$V_{DS} = 10V, V_{GS} = 0V, f = 1MHz$		260		pF
Output Capacitance	C_{oss}			48		
Reverse Transfer Capacitance	C_{rss}			27		
Total gate charge	Q_g	$V_{DS} = 10V, V_{GS} = 4.5V, I_D = 3.0A$		2.9	5	nC
Gate-source charge	Q_{gs}			0.4		
Gate-drain charge	Q_{gd}			0.6		
Switching Characteristics⁽⁴⁾						
Turn-on delay time	$t_{d(on)}$	$V_{DD} = 10V, R_L = 3.3\Omega, V_{GEN} = 4.5V, R_g = 6\Omega$		2.5		ns
Turn-on rise time	t_r			3.2		
Turn-off delay time	$t_{d(off)}$			21		
Turn-off fall time	t_f			3		

Notes:

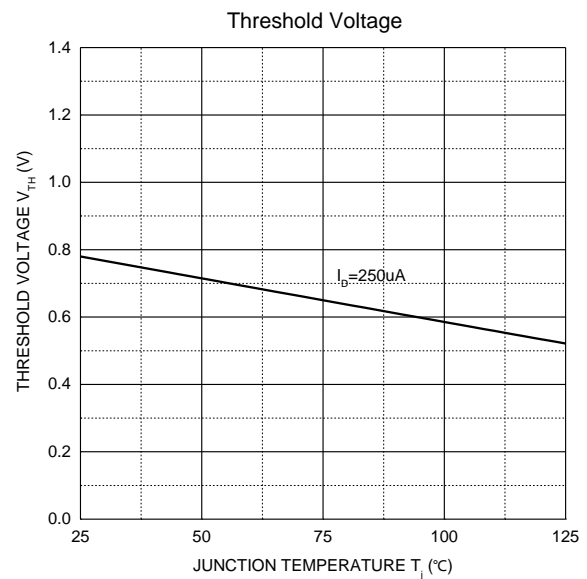
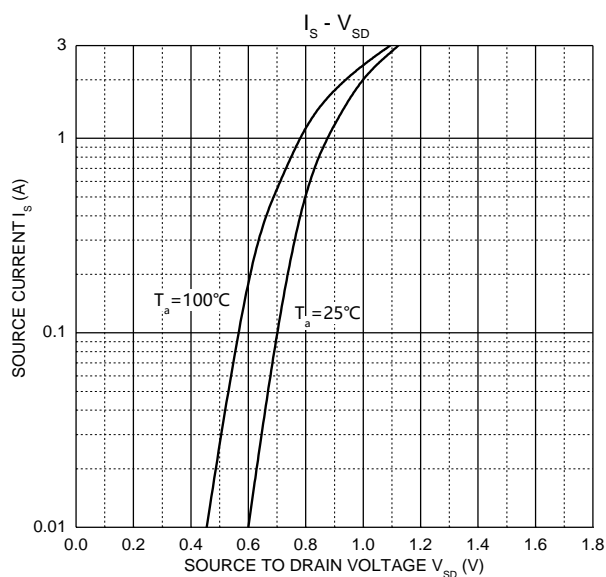
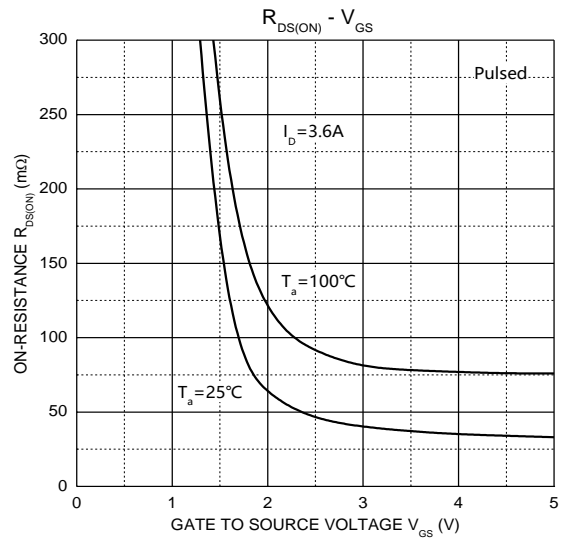
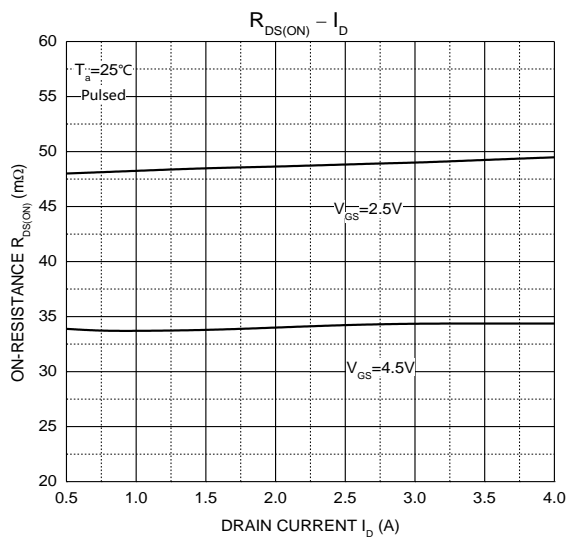
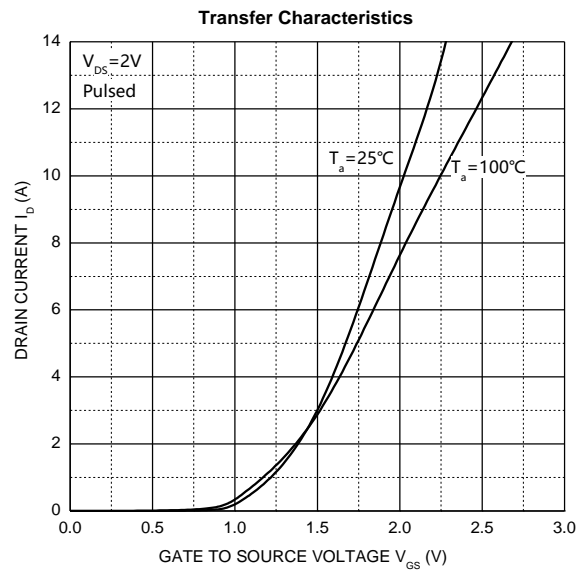
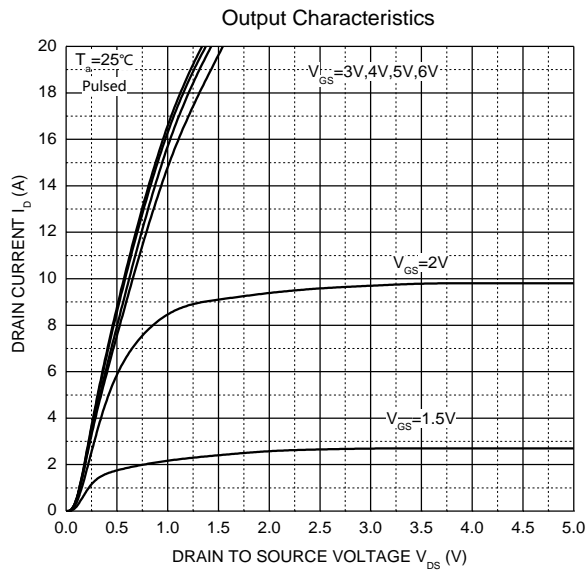
1. Repetitive Rating : Pulse width limited by maximum junction temperature.
2. Surface Mounted on FR4 Board, $t < 5$ sec.
3. Pulse Test : Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$.
4. Guaranteed by design, not subject to production testing.

Typical Electrical and Thermal Characteristics

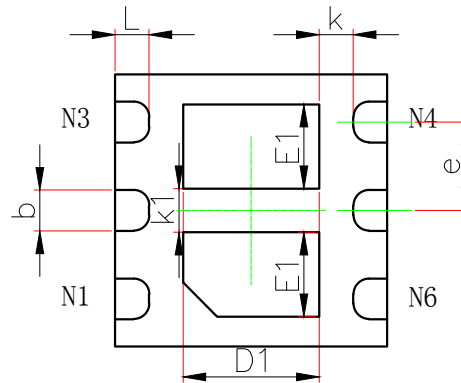
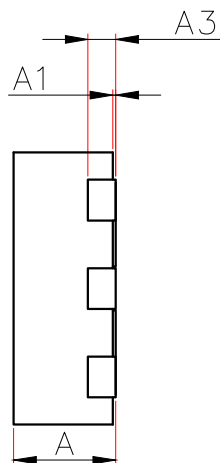
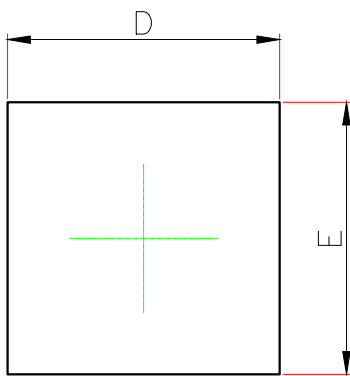
P-Channel MOS



N-Channel MOS



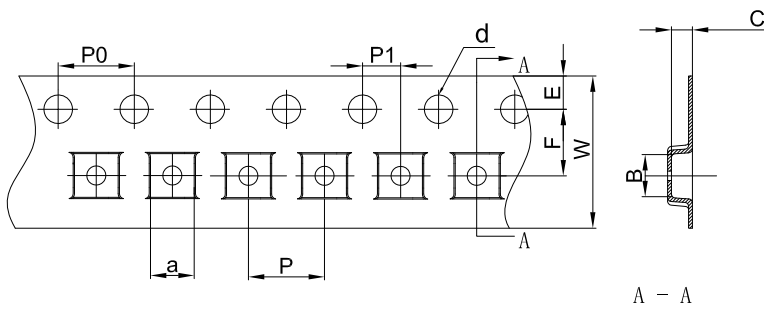
DFNWB2X2-6L Package Information



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	MIN.	MAX.	MIN.	MAX.
A	0.700	0.800	0.028	0.031
A1	0.000	0.050	0.000	0.002
A3	0.203REF.		0.008REF.	
D	1.900	2.100	0.075	0.083
E	1.900	2.100	0.075	0.083
D1	0.900	1.100	0.035	0.043
E1	0.520	0.720	0.020	0.028
b	0.250	0.350	0.010	0.014
e	0.650TYP.		0.026TYP.	
k	0.200MIN.		0.008MIN.	
k1	0.320REF.		0.013REF.	
L	0.200	0.300	0.008	0.012

DFNWB2X2-6L Tape and Reel

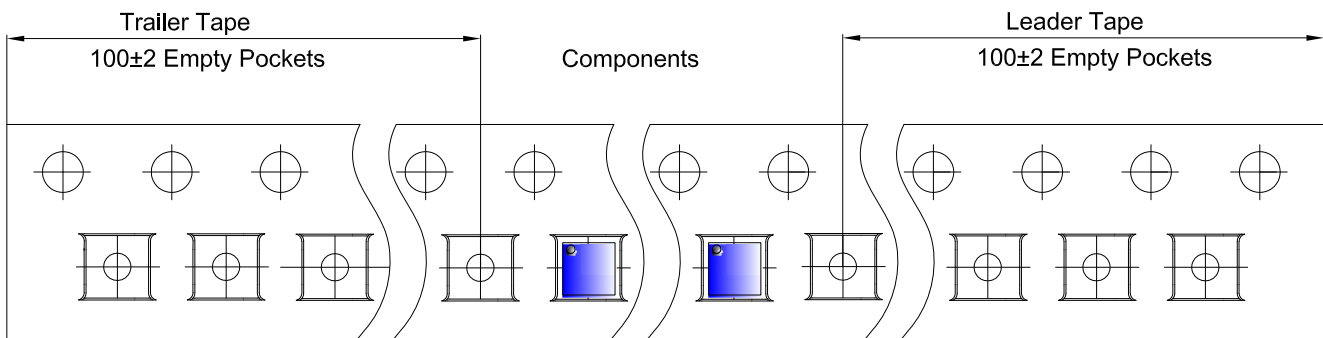
DFNWB2×2-6L Embossed Carrier Tape



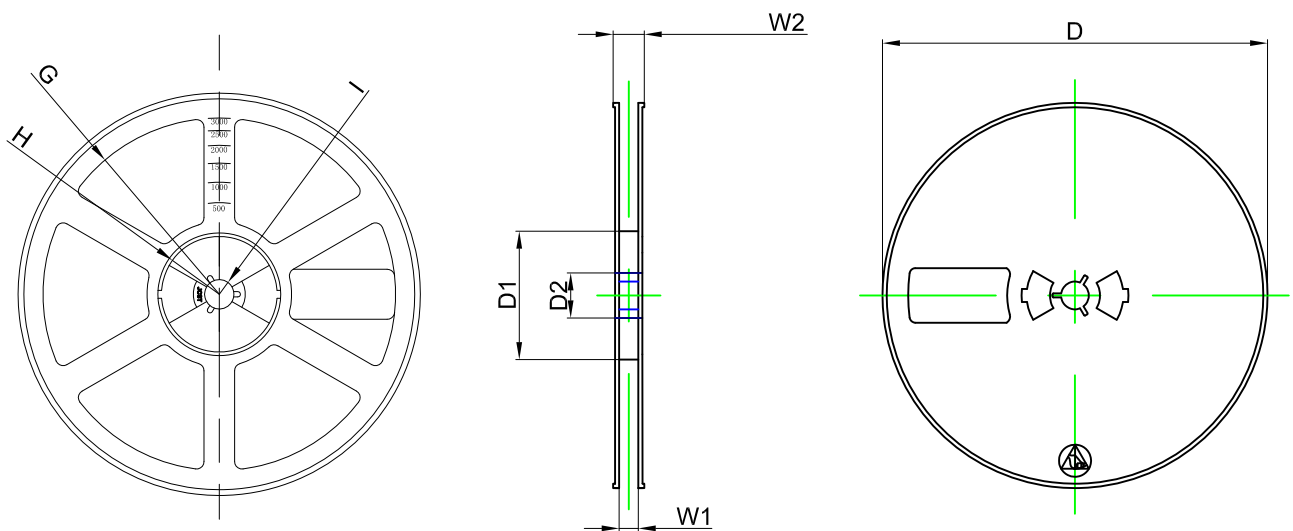
Dimensions are in millimeter

Pkg type	a	B	C	d	E	F	P0	P	P1	W
DFNWB2×2-6L	2.30	2.30	1.10	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

DFNWB2×2-6L Tape Leader and Trailer



DFNWB2×2-6L Reel



Dimensions are in millimeter

Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø180.00	60.00	13.00	R78.00	R25.60	R6.50	9.50	13.10

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	30,000 pcs	203×203×195	120,000 pcs	438×438×220	

单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)