

**Product Summary**

$V_{(BR)DSS}$	$R_{DS(on)TYP}$	$I_D$
-12V	14mΩ@-4.5V	-16A
	19mΩ@-2.5V	

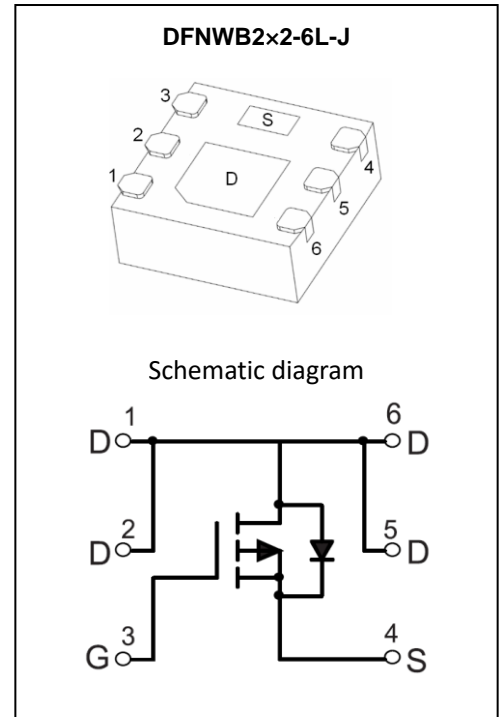
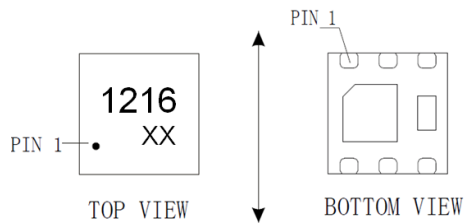
**Feature**

- TrenchFET Power MOSFET
- Excellent  $R_{DS(on)}$  and Low Gate Charge

**Application**

- DC/DC Converter
- Load Switch for Portable Devices
- Battery Switch

**MARKING:**



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

Parameter	Symbol	Value	Unit
Drain-Source Voltage	$V_{DS}$	-12	V
Gate-Source Voltage	$V_{GS}$	$\pm 8$	V
Continuous Drain Current	$I_D$	-16	A
Pulsed Drain Current <sup>(1)</sup>	$I_{DM}$	-65	A
Power Dissipation <sup>(2)</sup> ( $T_a=25^{\circ}C$ )	$P_D$	2.5	W
Maximum Power Dissipation <sup>(3)</sup> ( $T_c=25^{\circ}C$ )		18	W
Thermal Resistance from Junction to Ambient <sup>(4)</sup>	$R_{\theta JA}$	50	$^{\circ}C/W$
Thermal Resistance from Junction to Case <sup>(4)</sup>	$R_{\theta JC}$	6.9	$^{\circ}C/W$
Junction Temperature	$T_J$	150	$^{\circ}C$
Storage Temperature	$T_{STG}$	-55~ +150	$^{\circ}C$

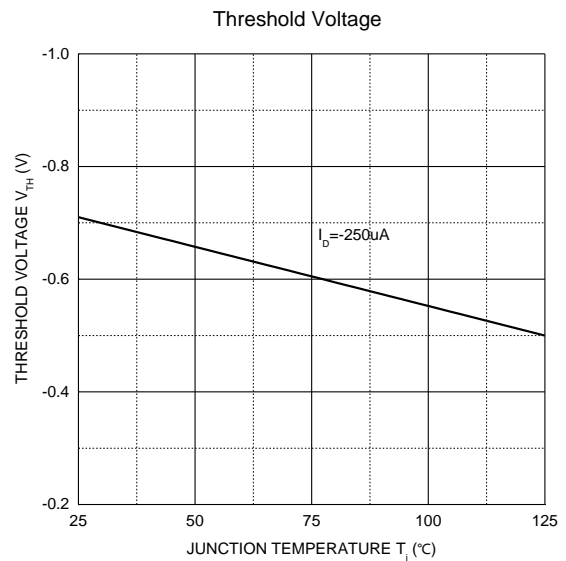
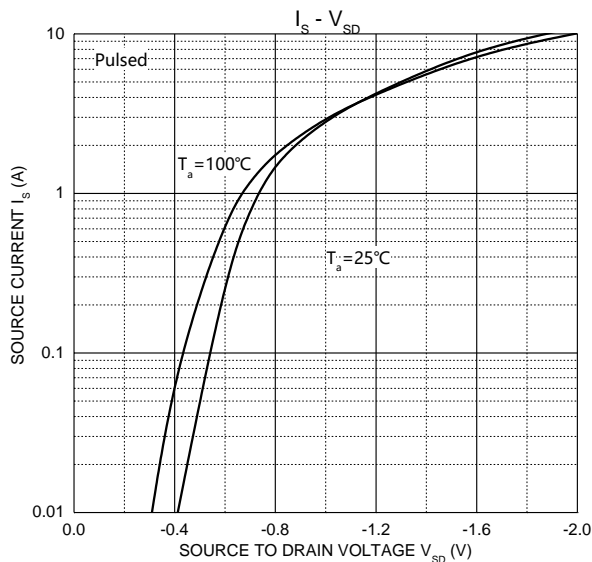
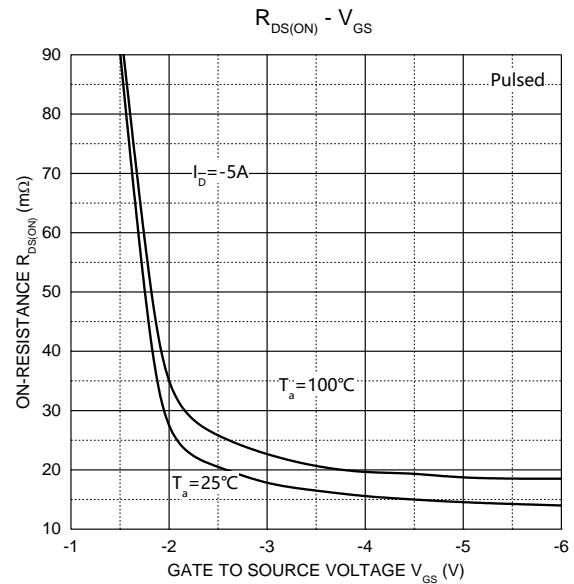
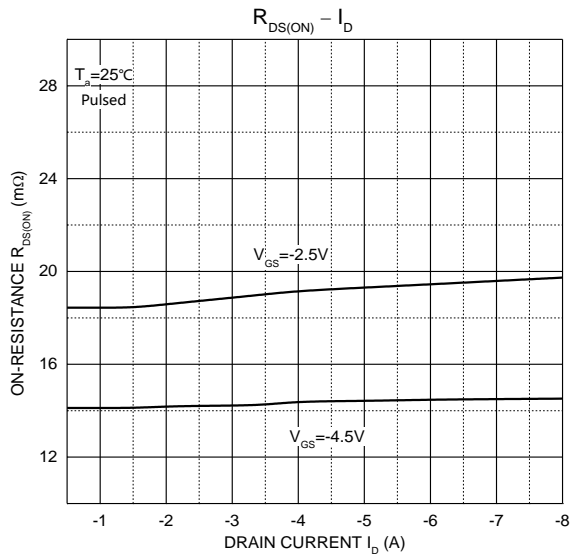
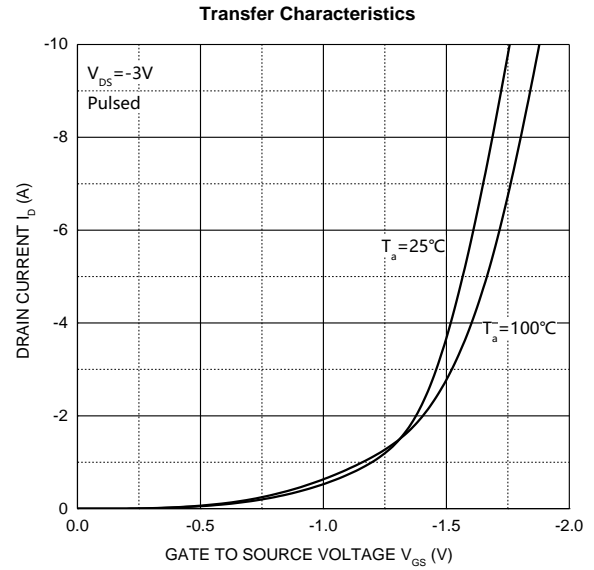
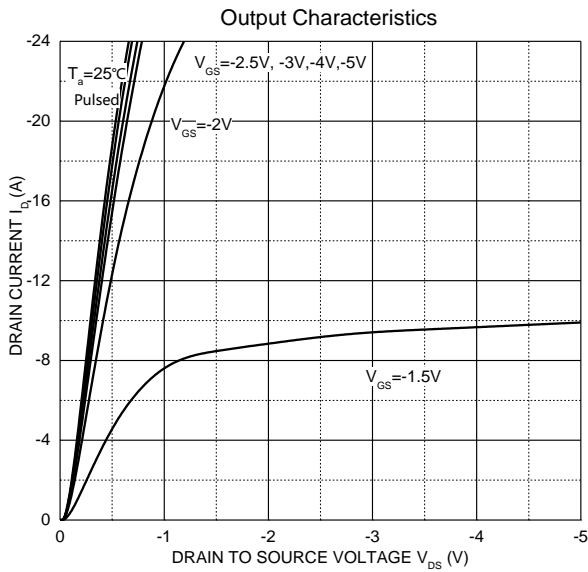
**MOSFET ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise noted)**

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
<b>Static Characteristics</b>						
Drain-source breakdown voltage	V <sub>(BR)DSS</sub>	V <sub>GS</sub> = 0V, I <sub>D</sub> = -250μA	-12			V
Zero gate voltage drain current	I <sub>DSS</sub>	V <sub>DS</sub> = -12V, V <sub>GS</sub> = 0V			-1	μA
Gate-body leakage current	I <sub>GSS</sub>	V <sub>GS</sub> = ±8V, V <sub>DS</sub> = 0V			±100	nA
Gate threshold voltage <sup>(5)</sup>	V <sub>GS(th)</sub>	V <sub>DS</sub> = V <sub>GS</sub> , I <sub>D</sub> = -250μA	-0.4	-0.7	-1	V
Drain-source on-resistance <sup>(5)</sup>	R <sub>DS(on)</sub>	V <sub>GS</sub> = -4.5V, I <sub>D</sub> = -6.7A		14	18	mΩ
		V <sub>GS</sub> = -2.5V, I <sub>D</sub> = -4.2A		19	27	
Forward transconductance <sup>(5)</sup>	g <sub>FS</sub>	V <sub>DS</sub> = -10V, I <sub>D</sub> = -6.7A		40		S
<b>Dynamic characteristics<sup>(6)</sup></b>						
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = -6V, V <sub>GS</sub> = 0V, f = 1MHz		1658		pF
Output Capacitance	C <sub>oss</sub>			354		
Reverse Transfer Capacitance	C <sub>rss</sub>			341		
Gate resistance	R <sub>g</sub>	f = 1MHz		45		Ω
Total Gate Charge	Q <sub>g</sub>	V <sub>DS</sub> = -6V, V <sub>GS</sub> = -4.5V, I <sub>D</sub> = -5A		18	23	nC
Gate-Source Charge	Q <sub>gs</sub>			3		
Gate-Drain Charge	Q <sub>gd</sub>			4.7		
Turn-on delay time	t <sub>d(on)</sub>	V <sub>DD</sub> = -6V, V <sub>GEN</sub> = -4.5V, I <sub>D</sub> = -4A R <sub>L</sub> = 6Ω, R <sub>GEN</sub> = 1Ω		33	40	ns
Turn-on rise time	t <sub>r</sub>			31	40	
Turn-off delay time	t <sub>d(off)</sub>			58	75	
Turn-off fall time	t <sub>f</sub>			26	35	
<b>Source-Drain Diode characteristics</b>						
Diode forward current	I <sub>S</sub>	T <sub>C</sub> = 25°C			-16	A
Diode pulsed forward current <sup>(1)</sup>	I <sub>SM</sub>				-48	A
Diode Forward voltage <sup>(4)</sup>	V <sub>DS</sub>	V <sub>GS</sub> = 0V, I <sub>S</sub> = -2A		-0.82	-1.2	V

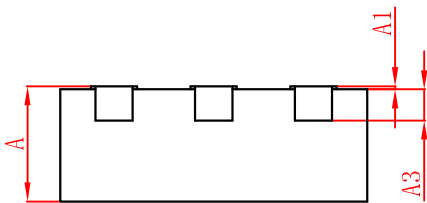
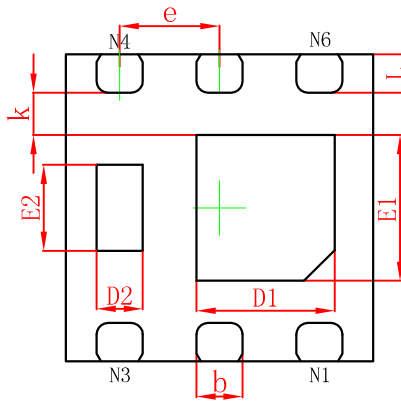
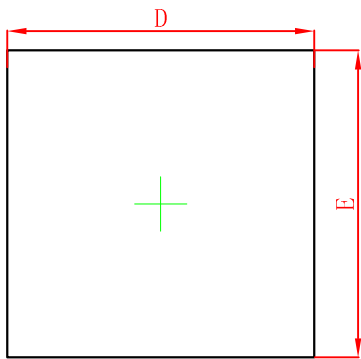
**Notes:**

1. Repetitive Rating: Pulse width limited by maximum junction temperature.
2. This test is performed with no heat sink at T<sub>a</sub> = 25°C.
3. This test is performed with infinite heat sink at T<sub>c</sub> = 25°C.
4. Surface mounted on FR4 board, t ≤ 10S.
5. Pulse Test: Pulse With ≤ 300μs, Duty Cycle ≤ 2%.
6. Guaranteed by design, not subject to production testing.

**Typical Electrical and Thermal Characteristics**



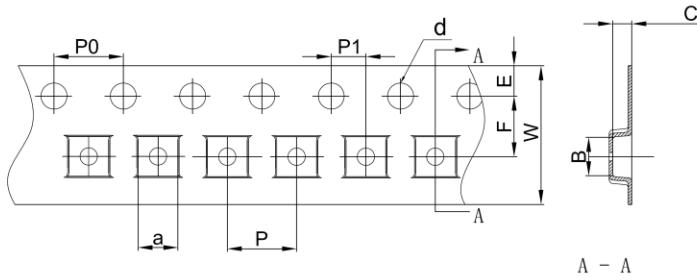
## DFNWB2x2-6L-J Package Information



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.800	0.032	0.032
A1	0.000	0.050	0.000	0.002
A3	0.203REF.		0.008REF.	
D	1.924	2.076	0.076	0.082
E	1.924	2.076	0.076	0.082
D1	0.800	1.000	0.031	0.039
E1	0.850	1.050	0.033	0.041
D2	0.200	0.400	0.008	0.016
E2	0.460	0.660	0.018	0.026
k	0.200MIN.		0.008MIN.	
b	0.250	0.350	0.010	0.014
e	0.650TYP.		0.026TYP.	
L	0.174	0.326	0.007	0.013

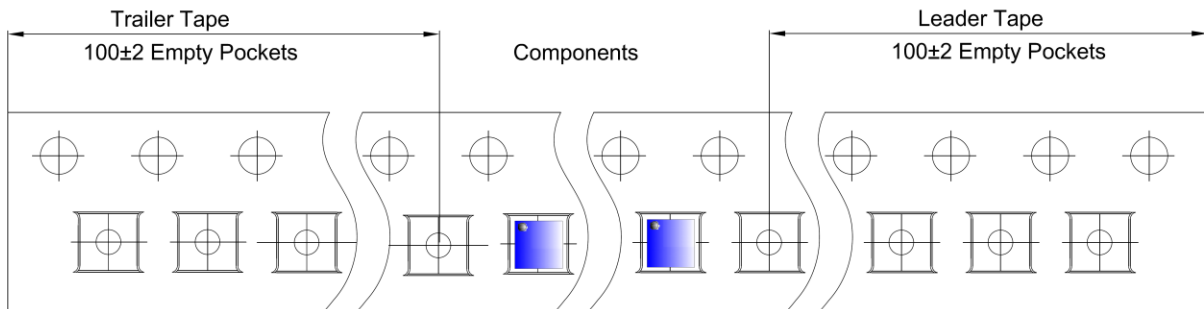
**DFNWB2×2-6L Tape and Reel**

**DFNWB2×2-6L Embossed Carrier Tape**

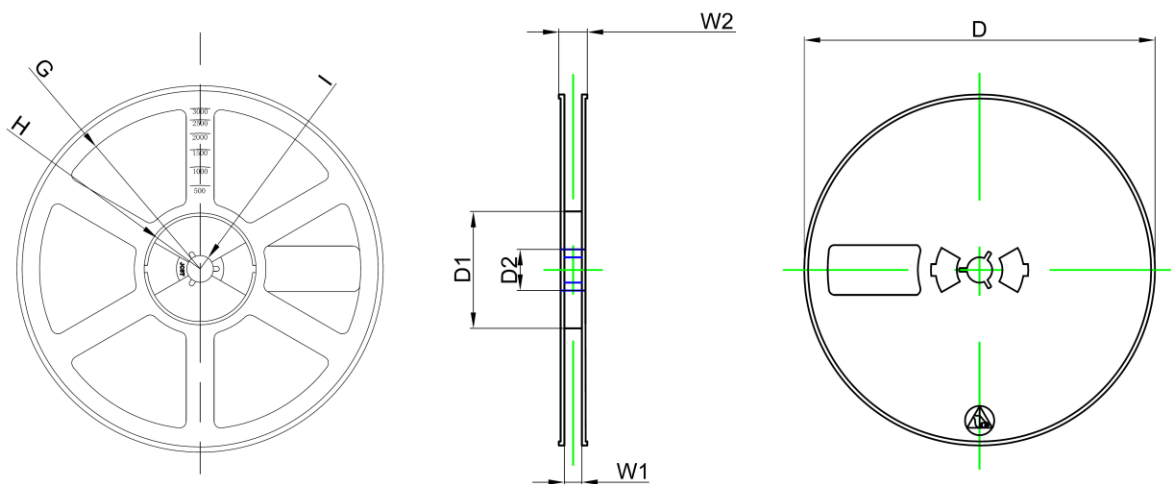


Dimensions are in millimeter										
Pkg type	a	B	C	d	E	F	P0	P	P1	W
DFNWB2×2-6L	2.30	2.30	1.10	∅1.50	1.75	3.50	4.00	4.00	2.00	8.00

**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	∅180.00	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\(格瑞宝\)](#)