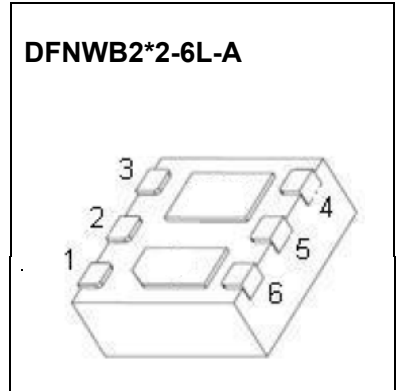




DFNWB2X2-6L-A Plastic-Encapsulate MOSFETS

CJMPD08 P-Channel Power MOSFET

$V_{(BR)DSS}$	$R_{DS(on)MAX}$	I_D
-12V	60mΩ@-4.5 V	-3.6 A
	80mΩ@-2.5 V	



General Description

The CJMPD08 uses advanced trench technology and design to Provide excellent $R_{DS(on)}$ with low gate charge. This device is suitable for use in DC-DC conversion applications.

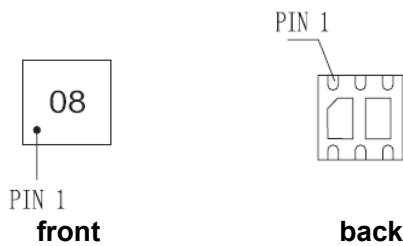
FEATURE

- Low Profile for Easy Fit in Thin Environments
- Bidirectional Current Folw with Common Source Configuration

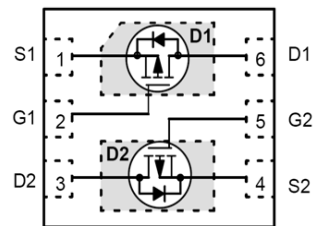
APPLICATIONS

- Optimized for Battery and Load Management Applications in Portable Equipment
- Li-Ion Battery Charging and Protection Circuits
- High Power Management in Portable , Battery Powered Products
- High Side Load Switch

MARKING:



Equivalent Circuit



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}	±8	
Continuous Drain Current	I_D	-3.6	A
Power Dissipation	P_D	0.7	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	178	$^{\circ}C/W$
Storage Temperature	T_j	150	$^{\circ}C$
Junction Temperature	T_{stg}	-55 ~ +150	

MOSFET ELECTRICAL CHARACTERISTICS

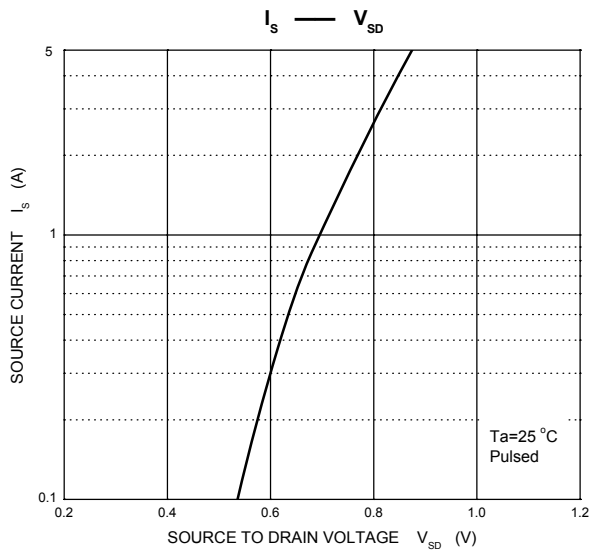
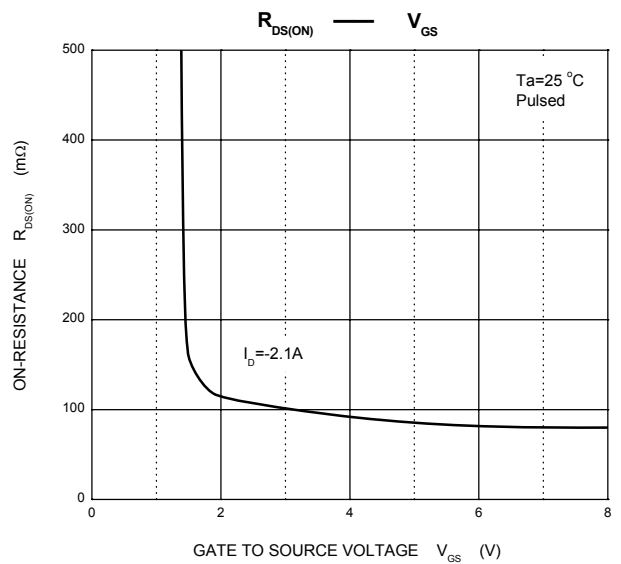
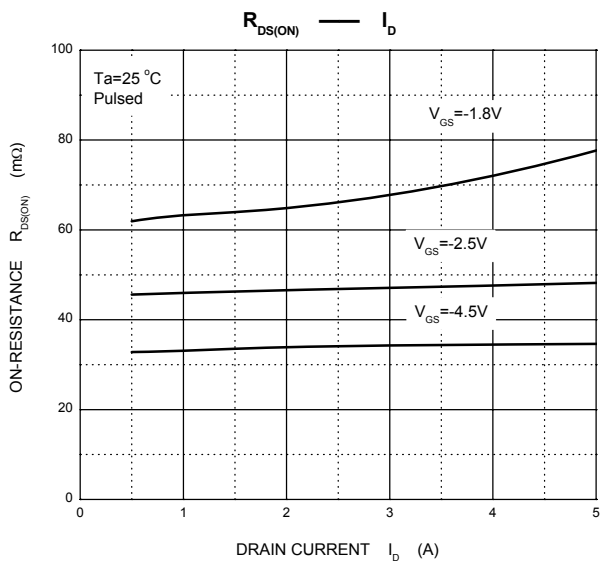
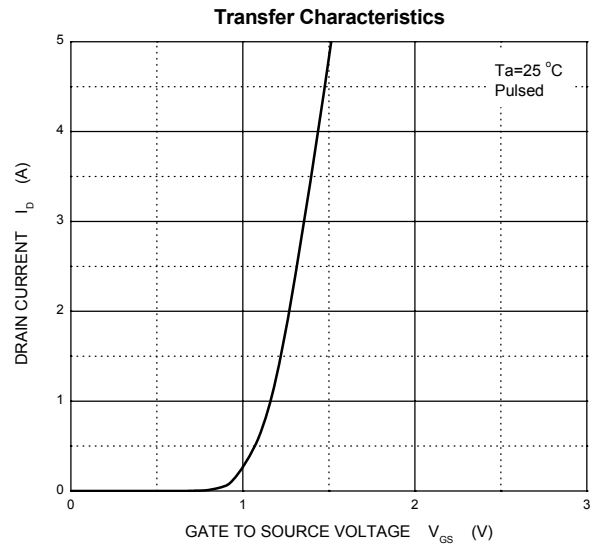
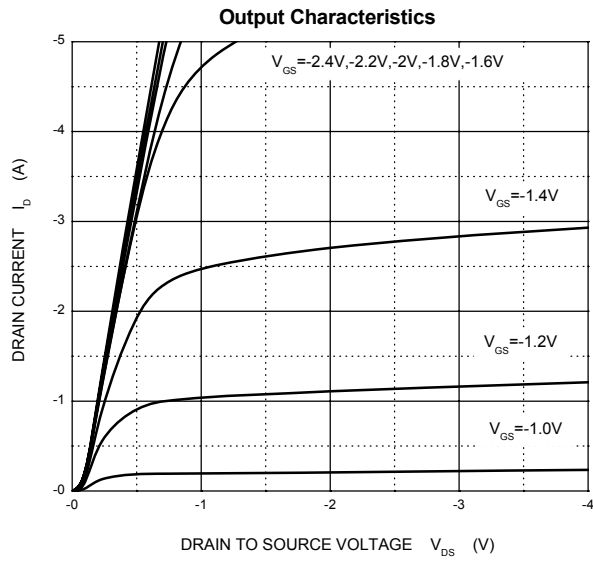
$T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
On/Off Characteristics						
Drain-source breakdown voltage	$V_{(BR)DSS}$	$V_{GS} = 0V, I_D = -250\mu A$	-12			V
Gate-threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = -250\mu A$	-0.4		-1	
Gate-body leakage current	I_{GSS}	$V_{DS} = 0V, V_{GS} = \pm 8V$			± 100	nA
Zero gate voltage drain current	I_{DSS}	$V_{DS} = -12V, V_{GS} = 0V$			-1	μA
Drain-source on-state resistance (Note 1)	$R_{DS(on)}$	$V_{GS} = -4.5V, I_D = -3.6A$			60	m Ω
		$V_{GS} = -2.5V, I_D = -3A$			80	
		$V_{GS} = -1.8V, I_D = -2A$			110	
		$V_{GS} = -1.5V, I_D = -1A$			170	
Forward transconductance (note 1)	g_{fs}	$V_{DS} = -10V, I_D = -2.7A$	5.5			S
Charges , Capacitances and Gate resistance						
Input capacitance (note 2)	C_{iss}	$V_{DS} = -15V, V_{GS} = 0V, f = 1MHz$		480		pF
Output capacitance (note 2)	C_{oss}			46		
Reverse transfer capacitance (note 2)	C_{rss}			10		
Total gate charge	Q_g	$V_{DS} = -4.5V, V_{GS} = -6V, I_D = -2.8A$		7.2		nC
Gate-source charge	Q_{gs}			2.2		
Gate-drain charge	Q_{gd}			1.2		
Switching times (note2)						
Turn-on delay time	$t_{d(on)}$	$V_{DS} = -6V, I_D = -2.8A,$ $V_{GS} = -4.5V, R_G = 6\Omega$		38		ns
Rise time	t_r			25		
Turn-off delay time	$t_{d(off)}$			43		
Fall time	t_f			5		
Source-drain diode characteristics						
Forward on voltage (note1)	V_{SD}	$V_{GS} = 0V, I_S = -1A$			-0.8	V

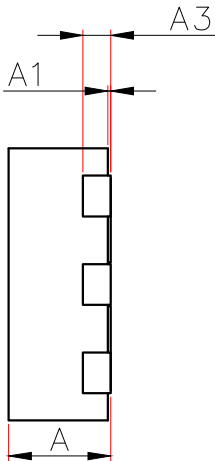
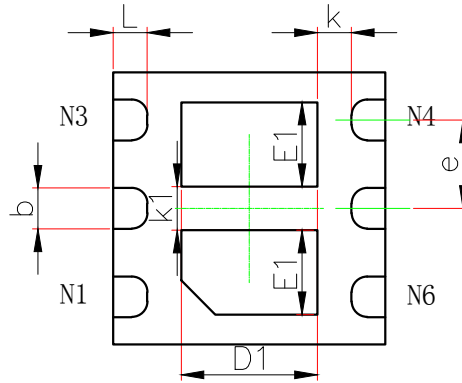
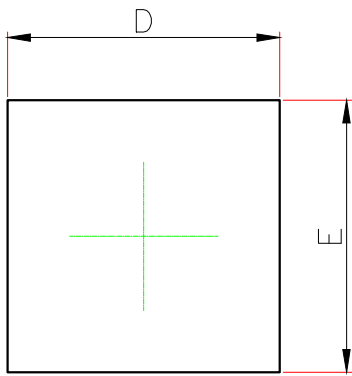
Notes:

1. Pulse Test : Pulse width $\leq 300\mu s$, duty cycle $\leq 2\%$.
2. These parameters have no way to verify.

Typical Characteristics

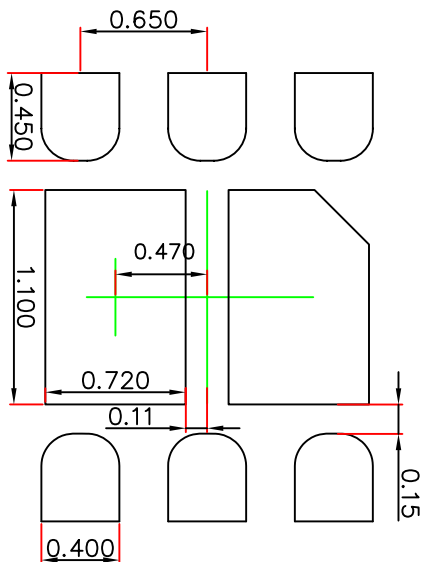


DFNWB2X2-6L-A Package Outline Dimensions



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-A Suggested Pad Layout



Note:

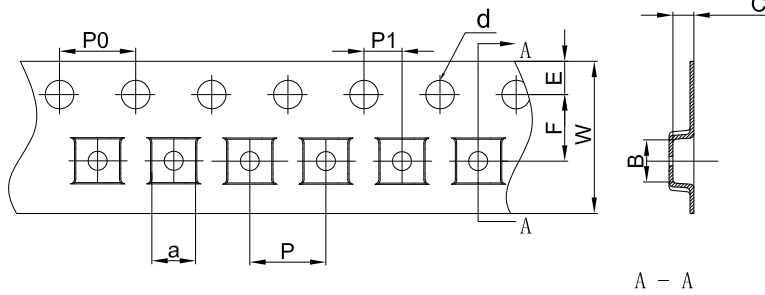
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.050 mm.
3. The pad layout is for reference purposes only.

NOTICE

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

DFNWB2X2-6L Tape and Reel

DFNWB2×2-6L Embossed Carrier Tape



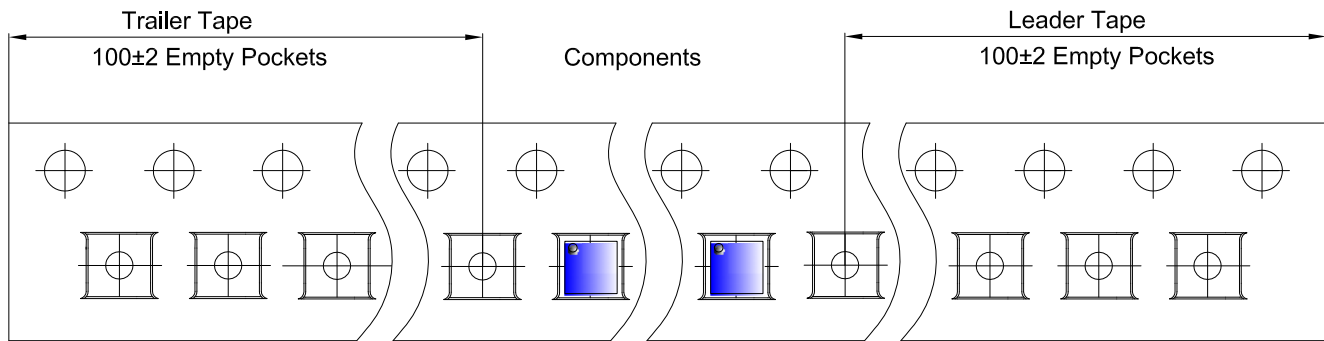
Packaging Description:

DFNWB2×2-6L 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 3,000 units per 7" or 18.0cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

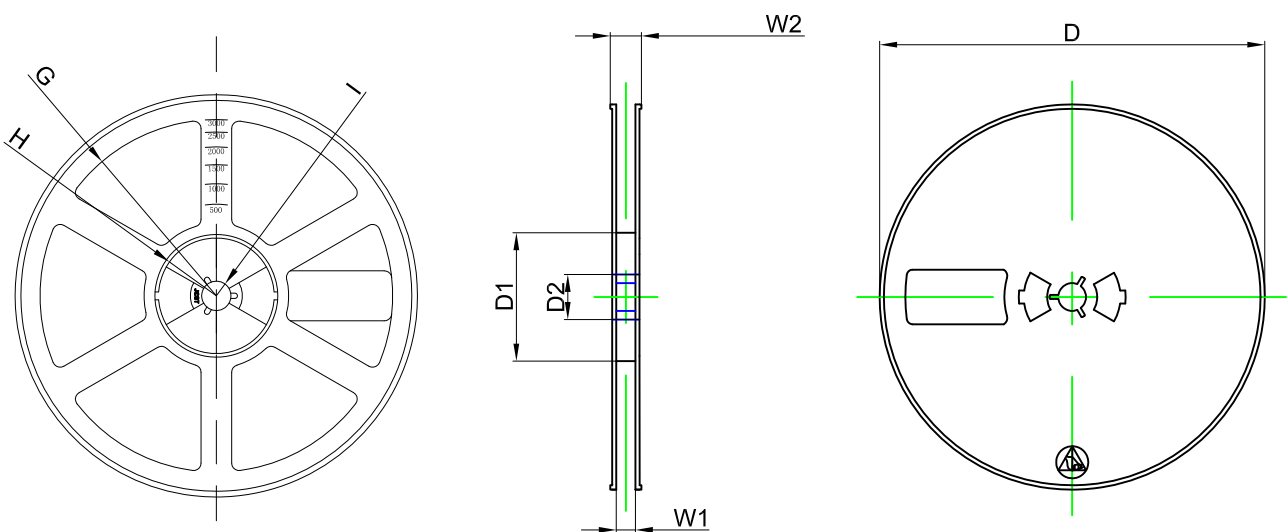
Dimensions are in millimeter

Pkg type	a	B	C	d	E	F	P0	P	P1	W
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	