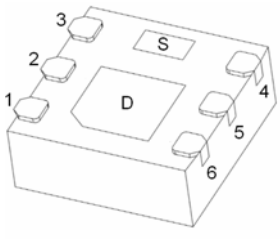
DFNWB2×2-6L Plastic-Encapsulate MOSFETS

CJM1216 P-Channel Power MOSFET

$V_{(BR)DSS}$	$R_{DS(on)}$TYP	I_D
-12V	13mΩ@-4.5V	-16A
	18mΩ@-2.5V	

DFNWB2×2-6L



1. DRAIN
2. DRAIN
3. GATE
4. SOURCE
5. DRAIN
6. DRAIN

DESCRIPTION

The CJM1216 uses advanced trench technology to provide excellent $R_{DS(on)}$, low gate charge and operation with low gate voltage. This device is suitable for use as a load switching application and a wide variety of other applications.

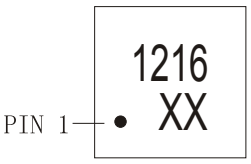
FEATURES

- Advanced trench MOSFET process technology
- Ultra low on-resistance with low gate charge

APPLICATIONS

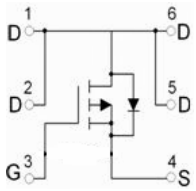
- PWM application
- Load switch
- Battery charge in cellular handset

MARKING



1216 = Part No.
Solid dot = Pin1 indicator.
XX = Code.

Equivalent Circuit



Maximum ratings (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DSS}	-12	V
Gate-Source Voltage	V_{GS}	±8	
Drain Current-Continuous	I_D	-16	A
Drain Current-Pulsed (note 1)	I_{DM}	-65	
Power Dissipation (note 2 , T_a=25℃)	P_D	2.5	W
Maximum Power Dissipation (note 3 , T_c=25℃)		18	
Thermal Resistance from Junction to Ambient (note 4)	$R_{\theta JA}$	50	℃/W
Thermal Resistance from Junction to Case (note 4)	$R_{\theta JC}$	6.9	
Operating Junction and Storage Temperature Range	T_j ,T_{STG}	-55 ~+150	℃

MOSFET ELECTRICAL CHARACTERISTICS

T_a=25℃ unless otherwise specified

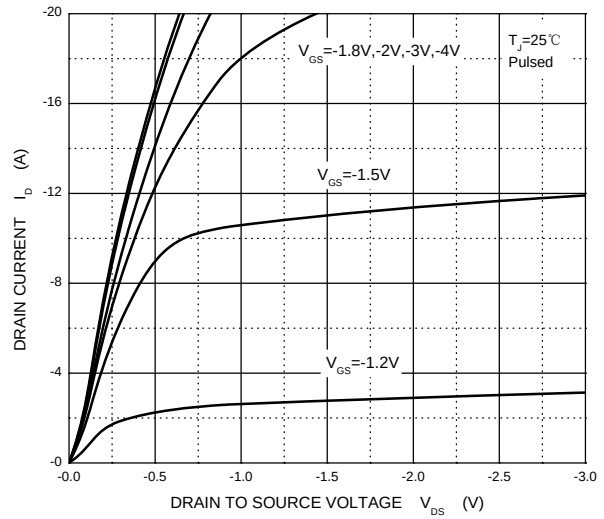
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Off Characteristics						
Drain-Source Breakdown Voltage	$V_{(BR)DSS}$	V_{GS} = 0V, I_D =-250μA	-12			V
Gate-Body Leakage Current	I_{GSS}	V_{DS} =0V, V_{GS} =±8V			±100	nA
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS} =-12V, V_{GS} =0V			-1	μA
On Characteristics (note 5)						
Gate-Threshold Voltage	$V_{GS(th)}$	V_{DS} =V_{GS}, I_D =-250μA	-0.4	-0.7	-1	V
Drain-Source On-State Resistance	$R_{DS(on)}$	V_{GS} =-4.5V, I_D =-6.7A		13	21	mΩ
		V_{GS} =-2.5V, I_D =-6.2A		18	27	
Forward Transconductance	g_{FS}	V_{DS} =-10V, I_D =-6.7A		40		S
Dynamic Characteristics (note 6)						
Input Capacitance	C_{iss}	V_{DS} =-10V,V_{GS} =0V,f =1MHz		2700		pF
Output Capacitance	C_{oss}			680		
Reverse Transfer Capacitance	C_{rss}			590		
Total Gate Charge	Q_g	V_{DS} =-6V,V_{GS} =-8V,I_D =-10A		60	100	nC
		V_{DS} =-6V,V_{GS} =-4.5V,I_D =-10A		35	48	
Gate-Source Charge	Q_{gs}			5		
Gate-Drain Charge	Q_{gd}			10		
Drain-Source Diode Characteristics						
Diode Forward Current (note 5)	I_S				-16	A
Diode Forward Voltage(note 4)	V_{SD}	V_{GS} =0V, I_{SD}=-8A			-1.2	V

Notes:

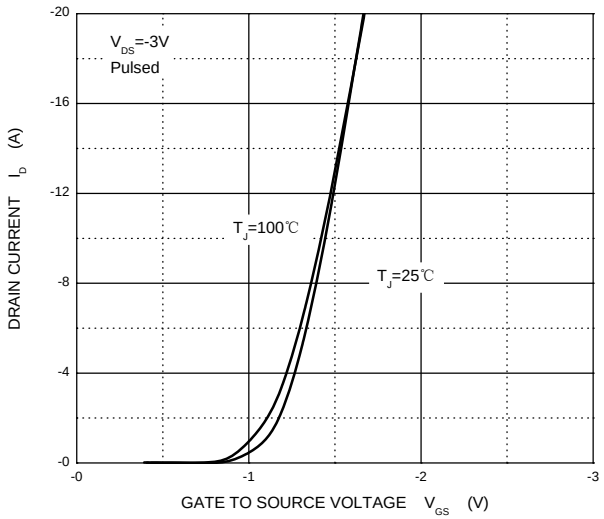
1. Repetitive Rating: Pulse width limited by maximum junction temperature.
2. This test is performed with no heat sink at T_a=25℃.
3. This test is performed with infinite heat sink at T_c=25℃.
4. Surface mounted on FR4 board, t≤10S.
5. Pulse Test: Pulse With ≤300μs,Duty Cycle≤2%.
6. Guaranteed by design,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

Typical Characteristics

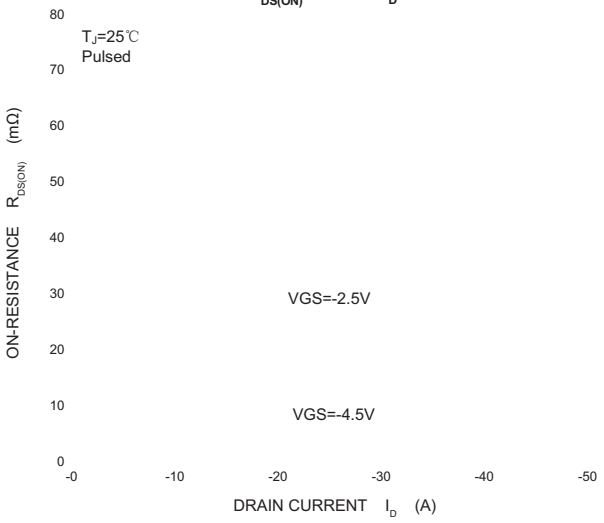
Output Characteristics



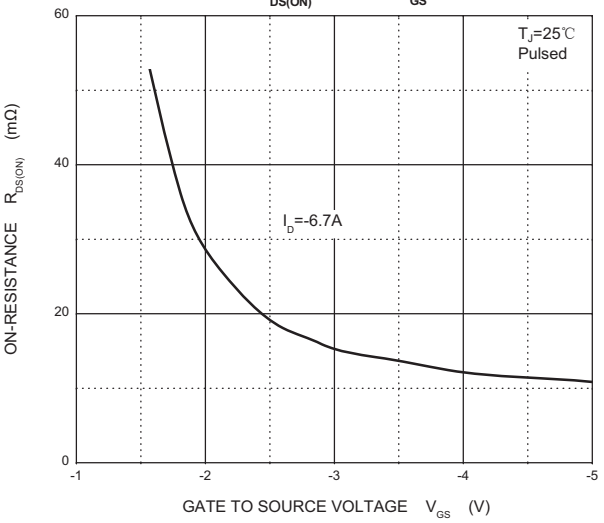
Transfer Characteristics



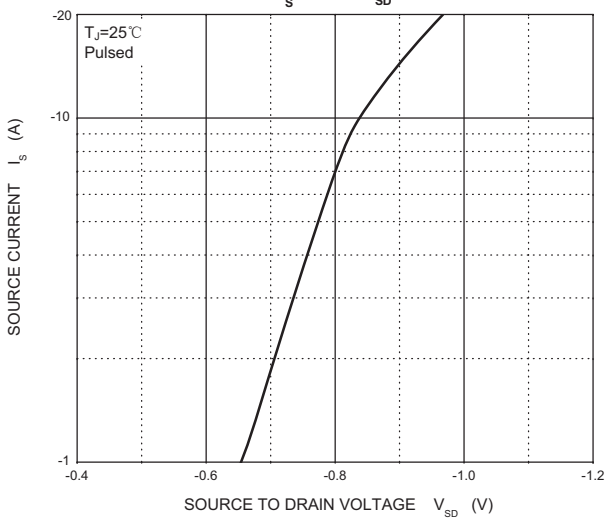
$R_{DS(ON)}$ —— I_D



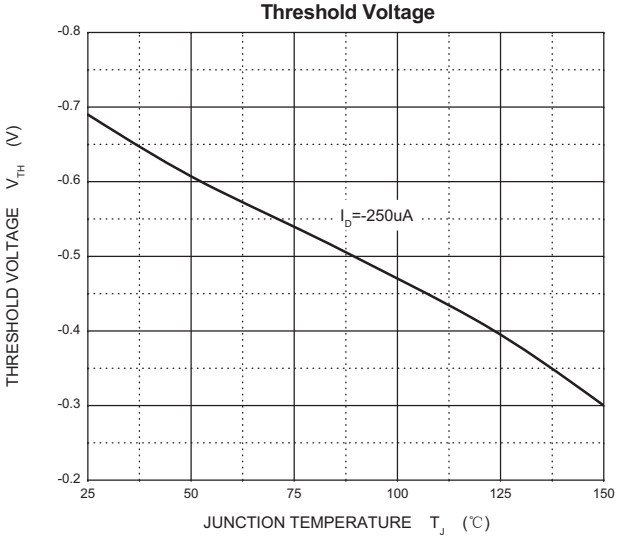
$R_{DS(ON)}$ —— V_{GS}



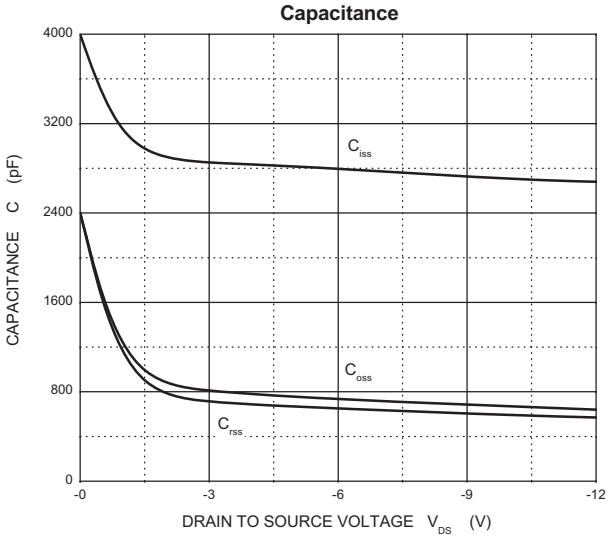
I_S —— V_{SD}



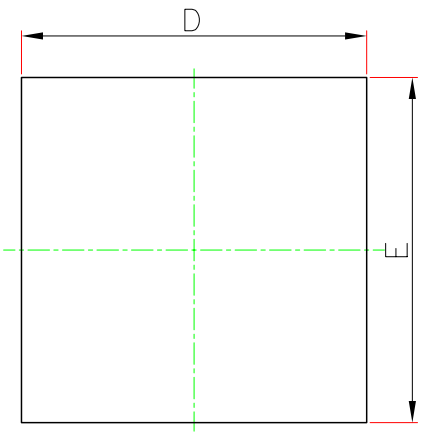
Threshold Voltage



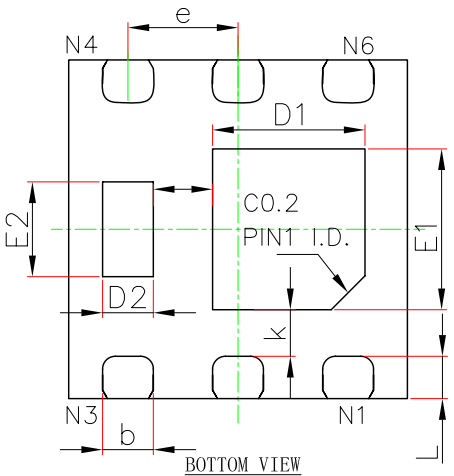
Typical Characteristics



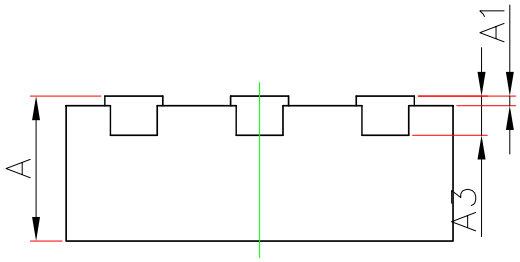
DFNWB2×2-6L-J Package Outline Dimensions



TOP VIEW
[顶视图]



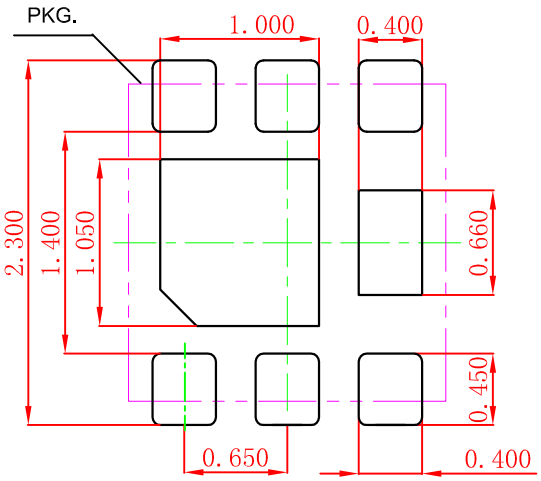
BOTTOM VIEW
[背视图]



SIDE VIEW
[侧视图]

Symbols	Dimensions in Milimeters		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	0.800	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
b	0.250	0.350	0.010	0.014
e	0.650BSC.		0.026BSC.	
k	0.275REF.		0.011REF.	
k1	0.350REF.		0.014REF.	
L	0.174	0.326	0.007	0.013

DFNWB2×2-6L-J Suggested Pad Layout



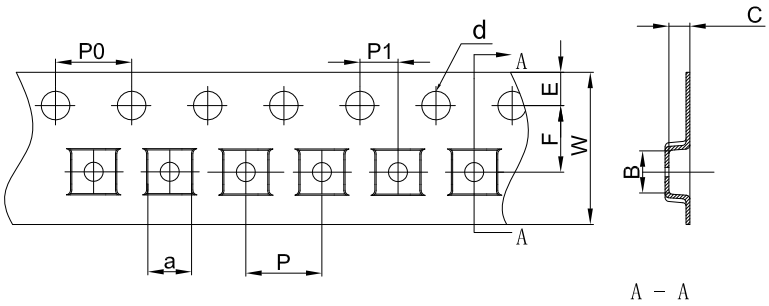
Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.050mm.
3.The pad layout is for reference purposes only.

NOTICE

SZCJ reserves the right to make modifications,enhan nts,improvements,corrections or other es without further notice to any product herein. SZCJ does not assume any liability arising out of the application or use of any product described h

DFNWB2×2-6L Tape and Reel

DFNWB2×2-6L Embossed Carrier Tape

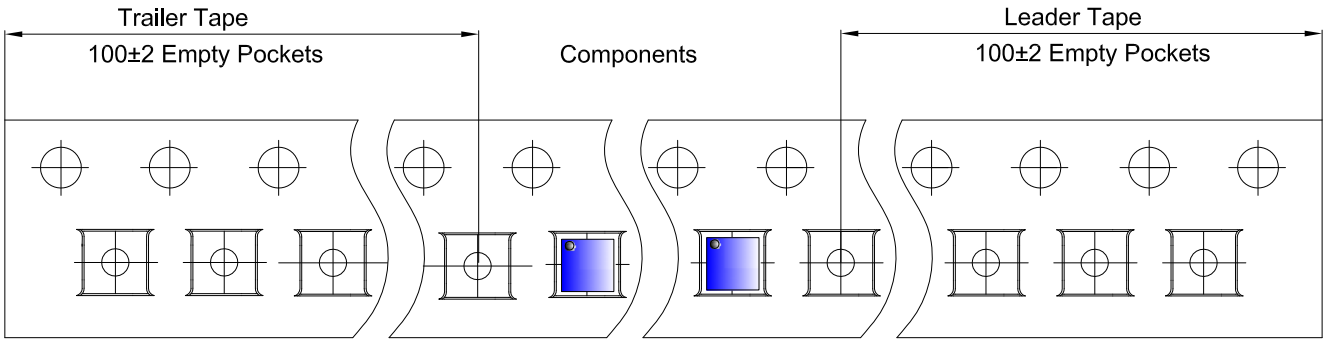


Packaging Description:

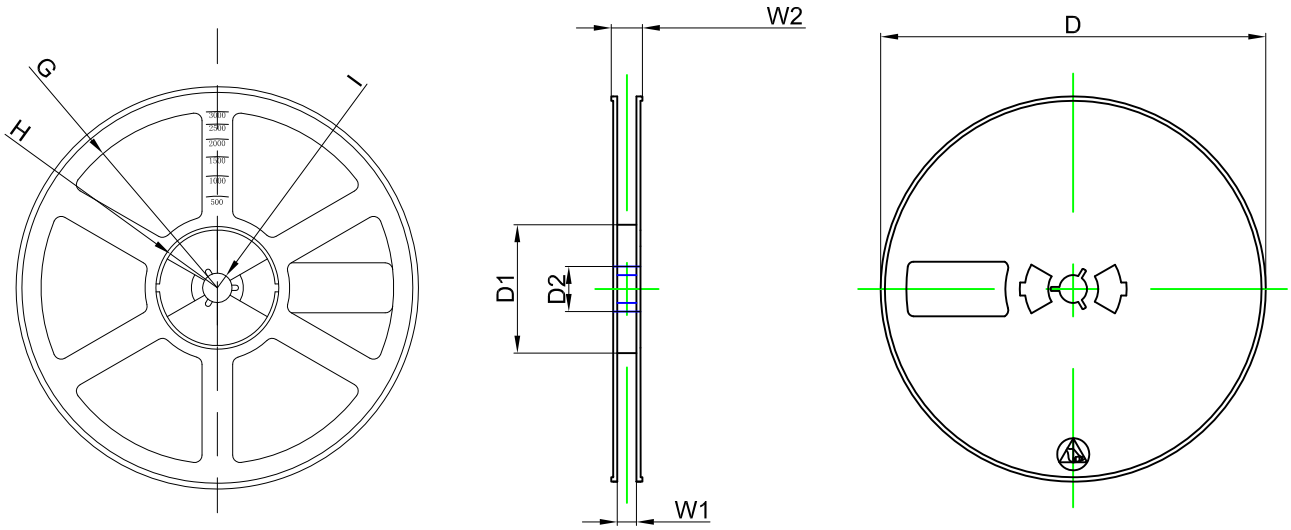
DFNWB2×2-6L parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts 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	