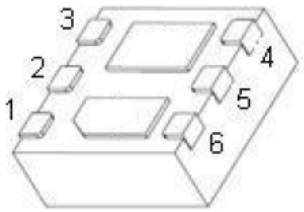
DFNWB2*2-6L-A Plastic-Encapsulate MOSFETS

CJMP06 P-Channel Power MOSFET

DFNWB2*2-6L-A



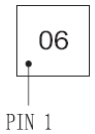
FEATURE

- Featuring a MOSFET and Schottky Diode
- Independent Pinout to each Device to Ease Circuit Design
- Ultra Low V_F Schottky

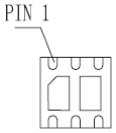
APPLICATIONS

- Li-Ion Battery Charging
- High Side DC-DC Conversion Circuits
- High Side Device for Small Brushless DC Motors
- Power Managemnet in Portable , Battery Powered Products

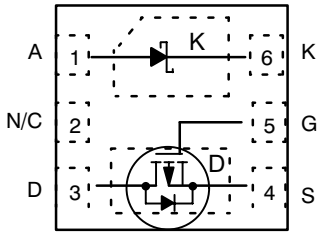
MARKING:



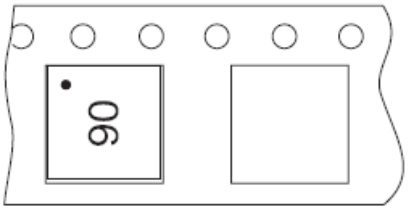
front



back



Tape Drawing (Unit : mm)



MOSFET MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	-20	V
Gate-Source Voltage	V_{GS}	±8	
Continuous Drain Current	I_D	-2	A
Power Dissipation	P_D	0.7	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	178	℃/W
Storage Temperature	T_j	150	℃
Junction Temperature	T_{stg}	-55 ~+150	

MOSFET ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
On/Off Characteristics						
Drain-source breakdown voltage	$V_{(BR)DSS}$	V_{GS} = 0V, I_D =-250μA	-20			V
Gate-threshold voltage	$V_{GS(th)}$	V_{DS} =V_{GS}, I_D =-250μA	-0.4		-1	
Gate-body leakage current	I_{GSS}	V_{DS} =0V, V_{GS} =±8V			±100	nA
Zero gate voltage drain current	I_{DSS}	V_{DS} =-20V, V_{GS} =0V			-1	μA
Drain-source on-state resistance (note 1)	$R_{DS(on)}$	V_{GS} =-4.5V, I_D =-2.8A			110	mΩ
		V_{GS} =-2.5V, I_D =-2.0A			150	
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} =-6V,V_{GS} =-4.5V,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, R_L=6Ω, V_{GS}=-4.5V,R_{GEN}=6Ω		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			-1.4	V

Notes:

1. Pulse Test : Pulse width≤300μs, duty cycle ≤2%.
2. These parameters have no way to verify.

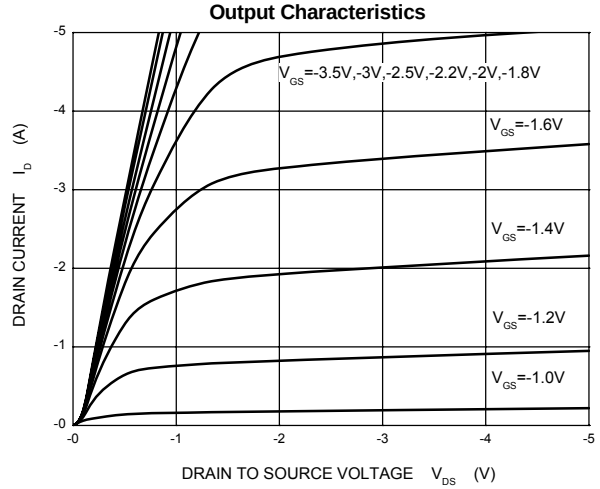
SCHOTTKY DIODE MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	20	V
DC blocking voltage	V_R	20	
Average rectified forward current	I_F	1	A

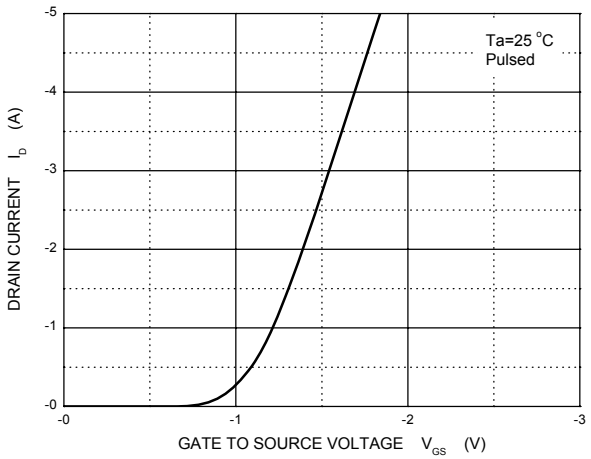
SCHOTTKY DIODE ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Forward voltage	V_F	I_F =0.1A			0.4	
		I_F =0.5A			0.5	
		I_F =1A			0.575	
Reverse current	I_R	V_R =20V			15	μA
		V_R =10V			5	

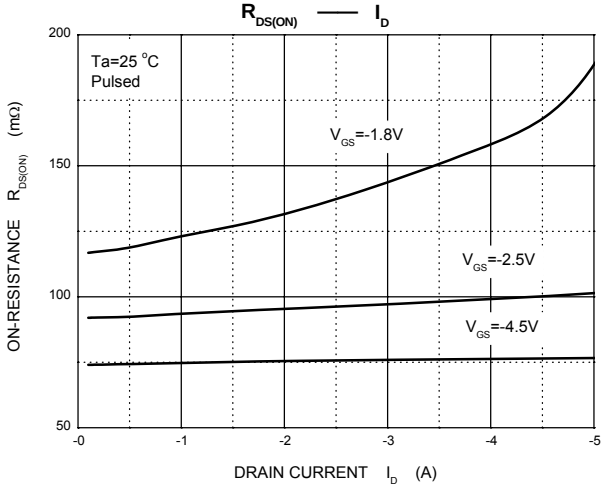
Output Characteristics



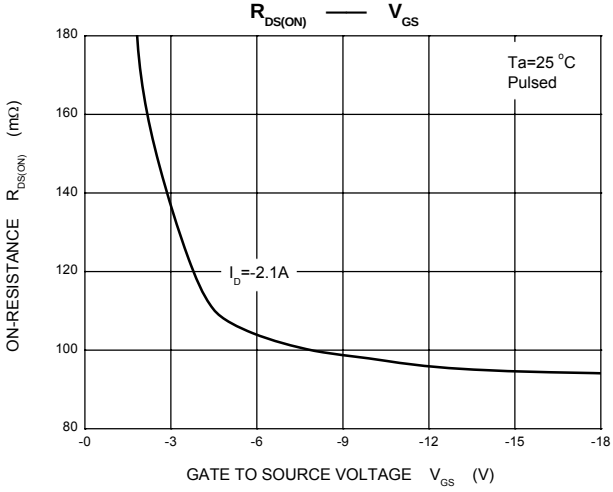
Transfer Characteristics



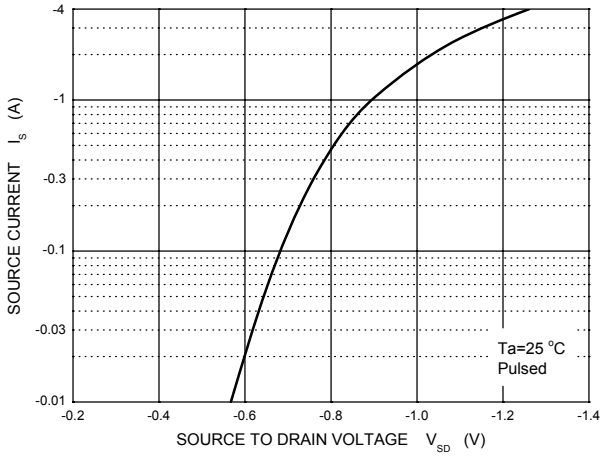
$R_{DS(ON)}$ — I_D



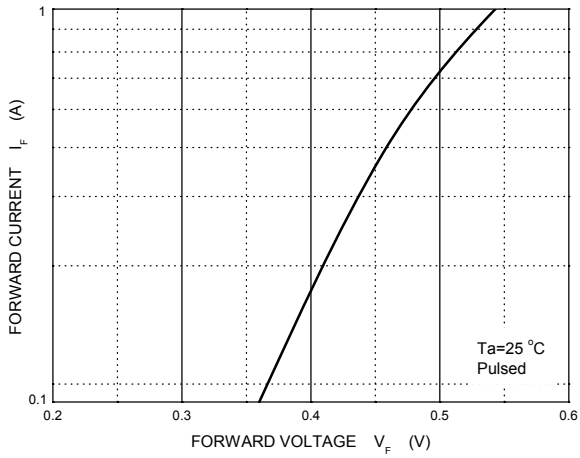
$R_{DS(ON)}$ — V_{GS}



I_S — V_{SD}



Forward Characteristics



Reverse Characteristics

