

Product Summary

$V_{(BR)DSS}$	$R_{DS(on)TYP}$	I_D
-16V	15m Ω @-4.5V	-16A
	20m Ω @-2.5V	

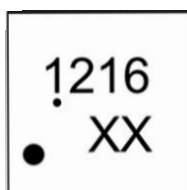
Feature

- Trench Technology Power MOSFET
- Low $R_{DS(ON)}$
- Low Gate Charge

Application

- Load Switch
- DC/DC Converter

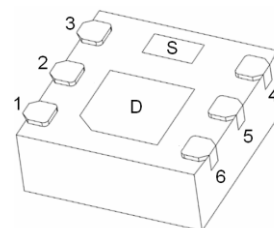
MARKING:



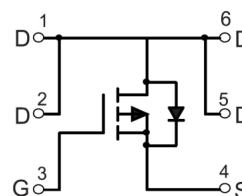
.1216= Device Code

XX = Date Code

DFN2X2-6L



Schematic diagram



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

Parameter		Symbol	Value	Unit
Drain - Source Voltage		V_{DS}	-16	V
Gate - Source Voltage		V_{GS}	± 10	V
Continuous Drain Current ^{1,5}	$T_A = 25^\circ\text{C}$	I_D	-16	A
	$T_A = 100^\circ\text{C}$		-10	
Pulsed Drain Current ²		I_{DM}	-64	A
Power Dissipation ^{4,5}		P_D	2.5	W
Thermal Resistance from Junction to Case ⁵		$R_{\theta JA}$	50	$^\circ\text{C/W}$
Junction Temperature		T_J	150	$^\circ\text{C}$
Storage Temperature		T_{STG}	-55~ +150	$^\circ\text{C}$

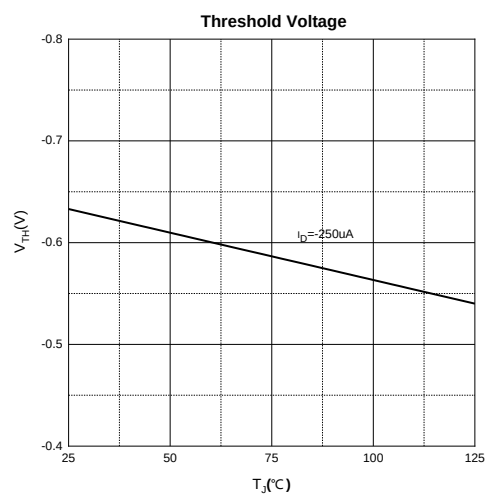
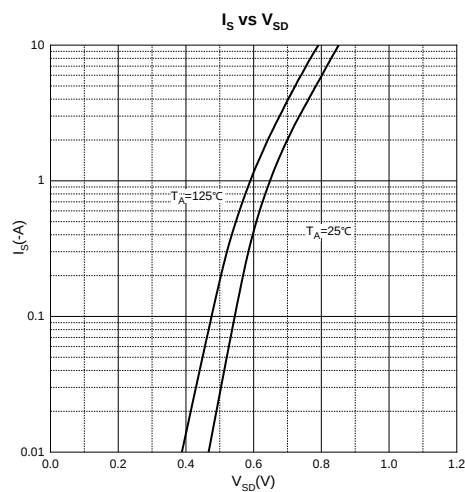
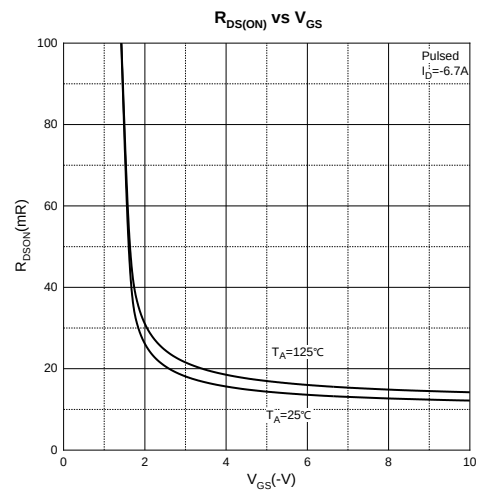
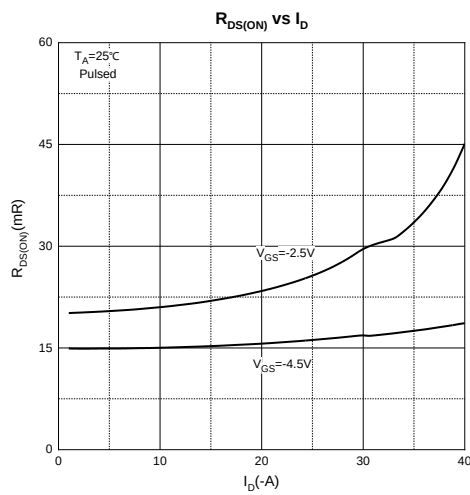
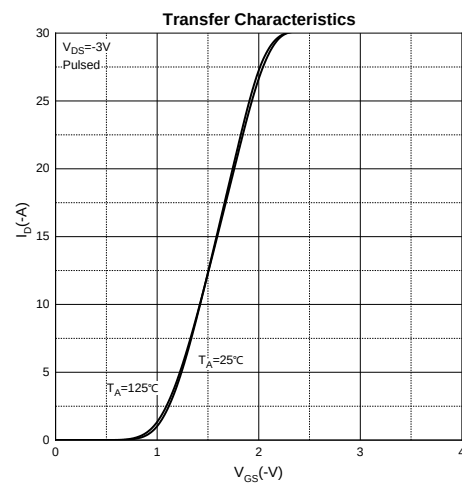
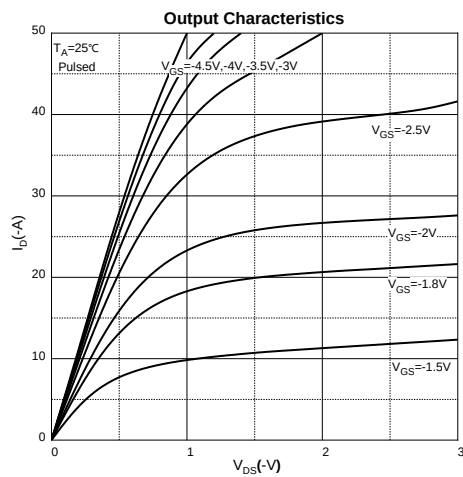
MOSFET ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

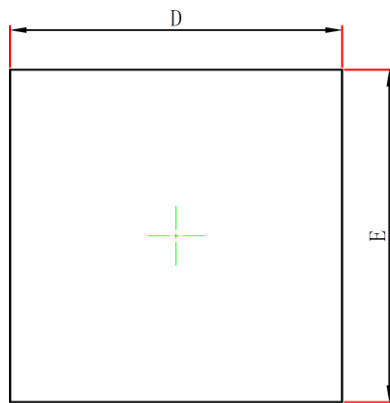
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Off Characteristics						
Drain - Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} = 0V , I _D = -250μA	-16			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = -16V, V _{GS} = 0V			-1	μA
Gate - Body Leakage Current	I _{GSS}	V _{GS} = ±8V, V _{DS} = 0V			±100	nA
On Characteristics ³						
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = 250μA	-0.4	-0.6	-1.0	V
Drain-source On-resistance	R _{DS(on)}	V _{GS} = -4.5V, I _D = -6.7A		15	20	mΩ
		V _{GS} = -2.5V, I _D = -4.2A		20	26	
Dynamic Characteristics						
Input Capacitance	C _{iss}	V _{DS} = -7.5V, V _{GS} = 0V, f = 1MHz		1066		pF
Output Capacitance	C _{oss}			156		
Reverse Transfer Capacitance	C _{rss}			129		
Gate Resistance	R _g	V _{DS} = 0V, V _{GS} = 0V, f = 1MHz		11		Ω
Switching Characteristics						
Total Gate Charge	Q _g	V _{DS} = -10V, V _{GS} = -4.5V, I _D = -4A		10.7		nC
Gate-source Charge	Q _{gs}			1.3		
Gate-drain Charge	Q _{gd}			2.7		
Turn-on Delay Time	t _{d(on)}	V _{DD} = -6V, V _{GS} = -4.5V, I _D = -4A, R _G =1Ω		33		ns
Turn-on Rise Time	t _r			31		
Turn-off Delay Time	t _{d(off)}			58		
Turn-off Fall Time	t _f			26		
Source - Drain Diode Characteristics						
Diode Forward Voltage ³	V _{SD}	V _{GS} = 0V, I _S = -1.9A			-1.2	V

Notes :

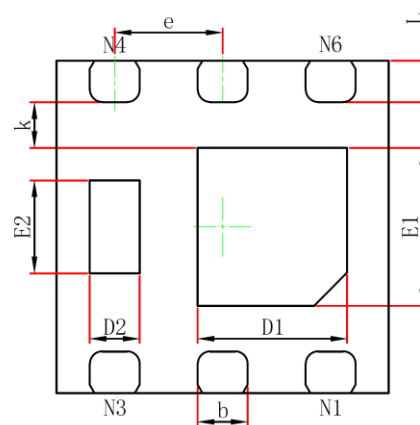
- 1.The maximum current rating is limited by package.
- 2.Pulse Test : Pulse Width ≤ 10μs, duty cycle ≤ 1%.
- 3.Pulse Test : Pulse Width ≤ 300μs, duty cycle ≤ 2%.
- 4.The power dissipation P_D is limited by T_{J(MAX)} = 150°C.
- 5.Device mounted on 1in² FR-4 board with 2oz. Copper, in a still air environment with T_A = 25°C.

Typical Characteristics

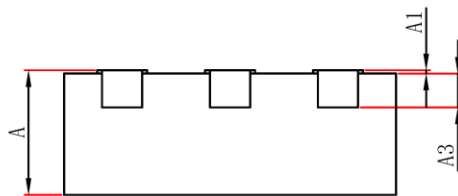


DFN2X2-6L Package Information


TOP VIEW



BOTTOM VIEW



SIDE VIEW

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.800	0.028	0.031
A1	0	0.050	0	0.002
A3	2.03REF		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
k	0.200MIN		0.008MIN	
b	0.250	0.350	0.010	0.014
e	0.65BSC		0.026TYP	
L	0.174	0.326	0.007	0.013

单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)