

/ Descriptions

DFN2×2C-6L P+P MOS
Double P+P-CHANNEL MOSFET in a DFN2×2C-6L Plastic Package.

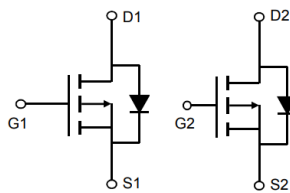
/ Features

$V_{DS(V)}=-16V$ $I_D=-7.8A$
 $R_{DS(ON)}@-4.5V(Typ.)=16.7m_{\Omega}$
 $R_{DS(ON)}@-2.5V(Typ.)=22.5m_{\Omega}$
 $R_{DS(ON)}@-1.8V(Typ.)=32.5m_{\Omega}$
HF Product.

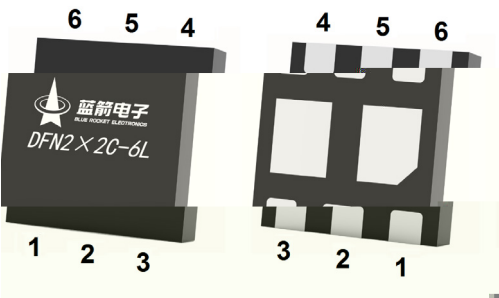
/ Applications

Load Switch, Battery Switch for Portable Devices, High-Speed Line Driver.

/ Equivalent Circuit



/ Pinning



出脚	定义
PIN 1	S1
PIN 2	G1
PIN 3	D2
PIN 4	S2
PIN 5	G2
PIN 6	D1

/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-16	V
Gate-Source Voltage	V_{GS}	± 12	V
Continuous Drain Current	I_D	-7.8	A
Pulsed Drain Current	I_{DM}	-30.5	A
Power Dissipation	P_D	1.7	W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	
Maximum Junction-to-Ambient	R_{JA}	73.5	$^{\circ}\text{C}/\text{W}$

Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DS}	$I_D=-250\mu\text{A}$ $V_{GS}=0\text{V}$	-16	-17		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-12.8\text{V}$ $V_{GS}=0\text{V}$			-1.0	μA
Gate-Body leakage current	I_{GSS}	$V_{DS}=0\text{V}$ $V_{GS}=\pm 12\text{V}$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=-250\mu\text{A}$	-0.5	-0.6	-1.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=-4.5\text{V}$ $I_D=-3.5\text{A}$		16.7	20	m Ω
		$V_{GS}=-2.5\text{V}$ $I_D=-3.5\text{A}$		22.5	25	
		$V_{GS}=-1.8\text{V}$ $I_D=-1\text{A}$		32.5	100	
Diode Forward Voltage	V_{SD}	$I_S=-1\text{A}$ $V_{GS}=0\text{V}$			-1.2	V
Gate resistance	R_g	$V_{GS}=0\text{V}$, $f=1\text{MHz}$ $V_{DS}=0\text{V}$,		5.8		Ω
Input Capacitance	C_{iss}	$V_{GS}=0\text{V}$ $V_{DS}=-5\text{V}$ $f=1\text{MHz}$		1350		pF
Output Capacitance	C_{oss}			290		
Reverse Transfer Capacitance	C_{rss}			250		
Total Gate Charge	Q_g	$V_{GS}=-4.5\text{V}$, $V_{DS}=-10\text{V}$, $I_D=-7.0\text{A}$		13.2		nC
Gate Source Charge	Q_{gs}			1.5		
Gate Drain Charge	Q_{gd}			3.6		
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=-4.5\text{V}$ $I_D=-7.0\text{A}$ $V_{DS}=-10\text{V}$ $R_{GEN}=3\Omega$		13.7		ns
Turn-On Rise Time	t_r			47.6		
Turn-Off Delay Time	$t_{d(off)}$			43.1		
Turn-Off Fall Time	t_f			29.5		

/ Electrical Characteristic Curve

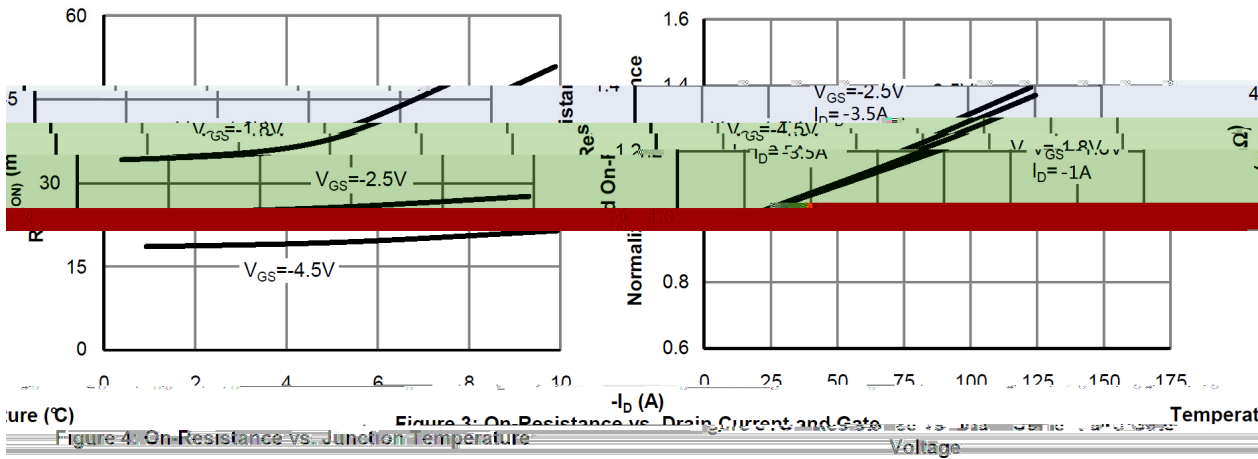
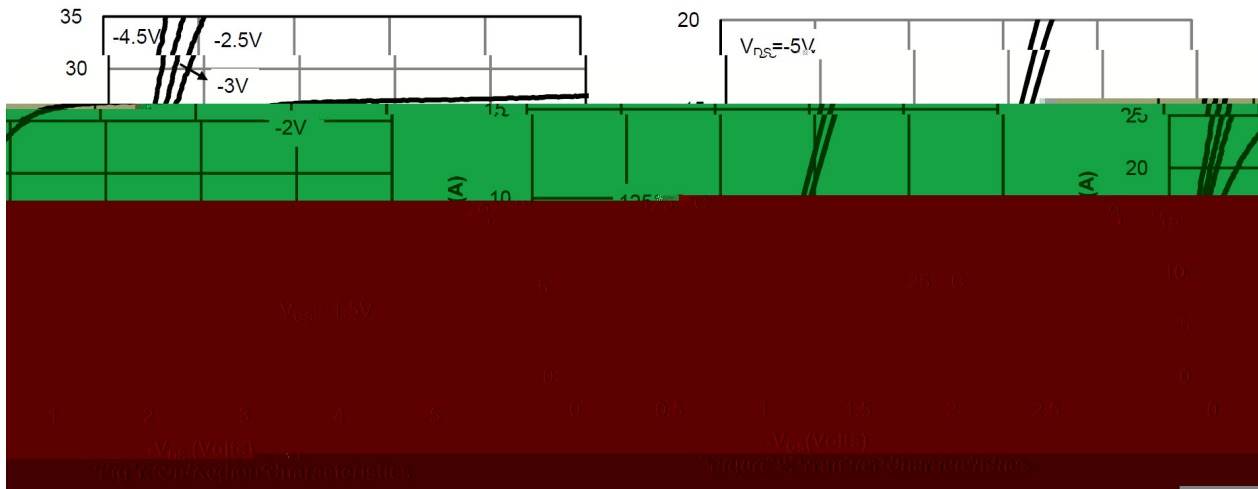


Figure 4: On-Resistance vs. Junction Temperature

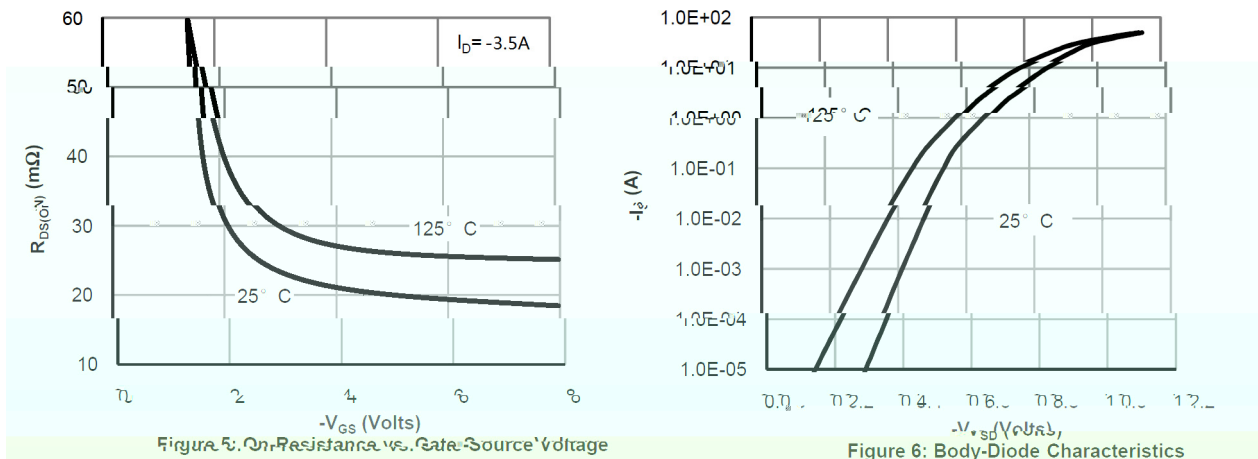
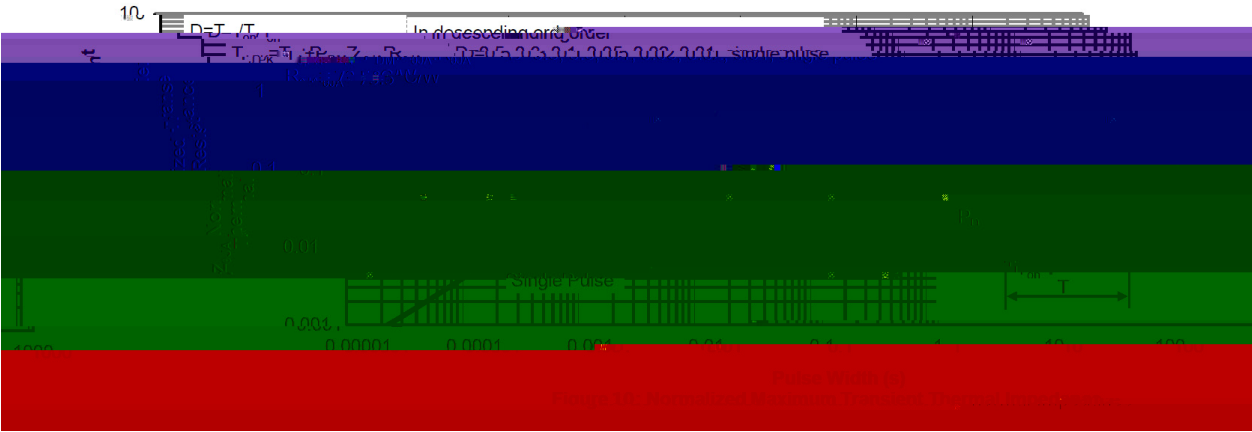
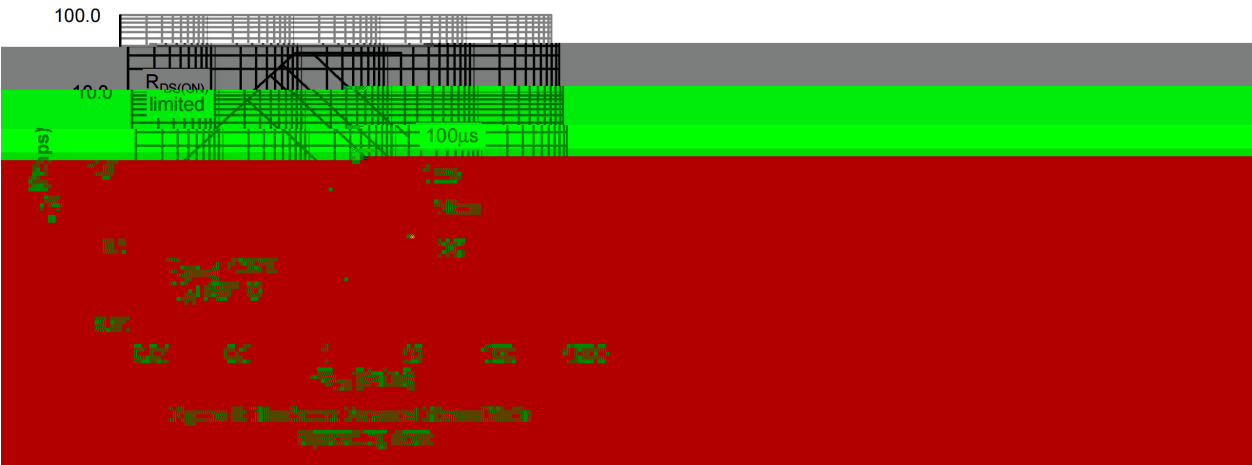
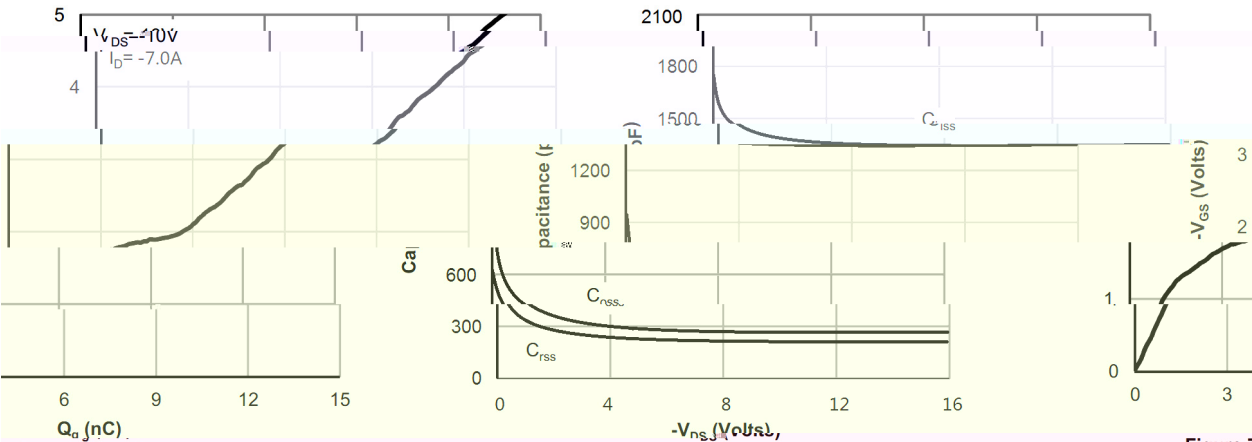


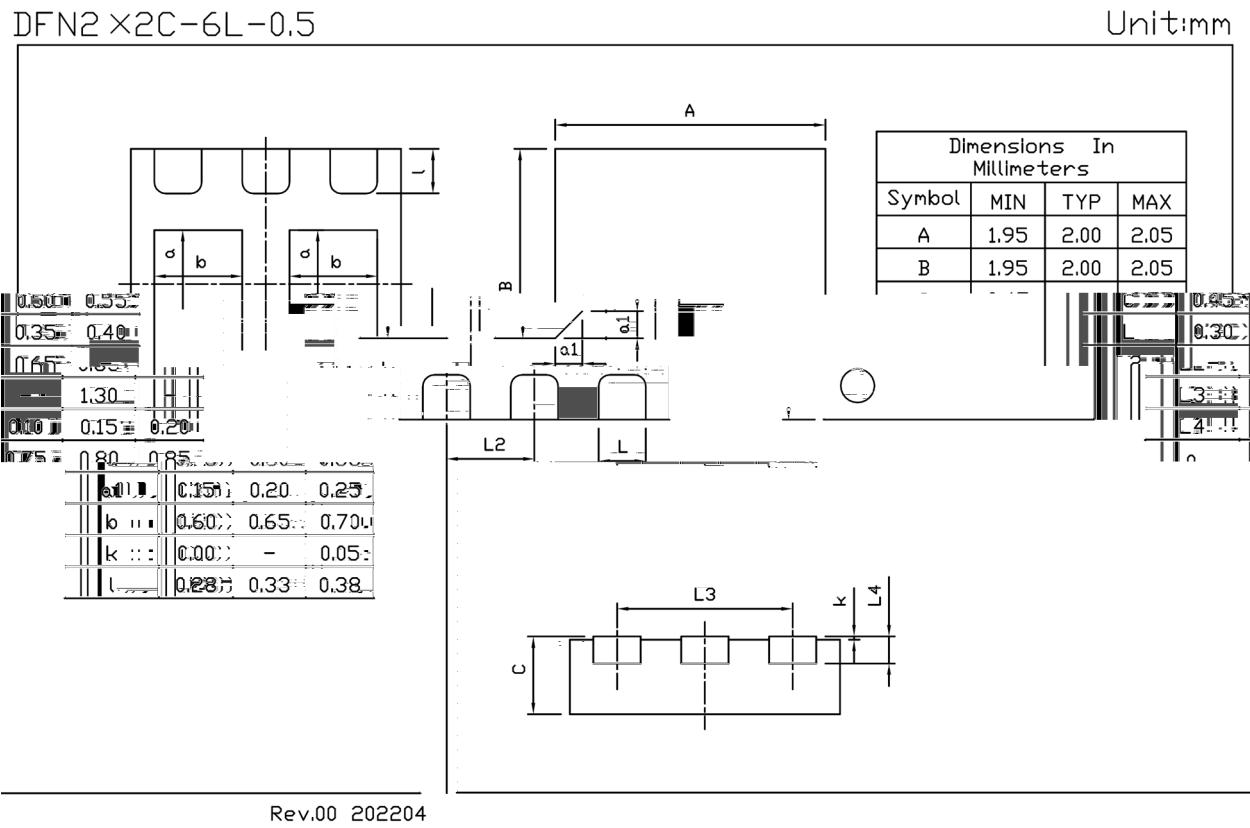
Figure 5: On-Resistance vs. Gate-Source Voltage

Figure 6: Body-Diode Characteristics

Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

200P016

Note:

BR: Company Code

200P016: Product Type Code

****: Lot No. Code, code change with Lot No.

