

/ Descriptions

DFN2×2B-6L P MOS

P-Channel Enhancement Mode Field Effect Transistor in a DFN2×2B-6L Plastic Package.

/ Features

V_{DS} (V) = -16V I_D = -12A

$R_{DS(ON)}$ @-4.5V 15mΩ(Type.13mΩ)

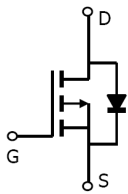
$R_{DS(ON)}$ @-2.5V 25mΩ(Type.18mΩ)

HF Product.

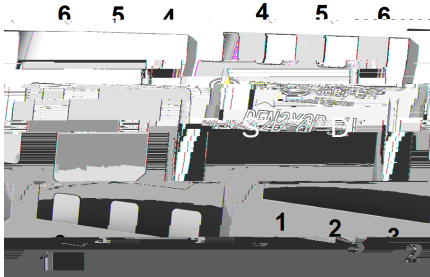
/ Applications

Power Management in Notebook computer, Portable Equipment and Battery powered systems.

/ Equivalent Circuit



/ Pinning



/ Marking

See Marking Instructions.

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

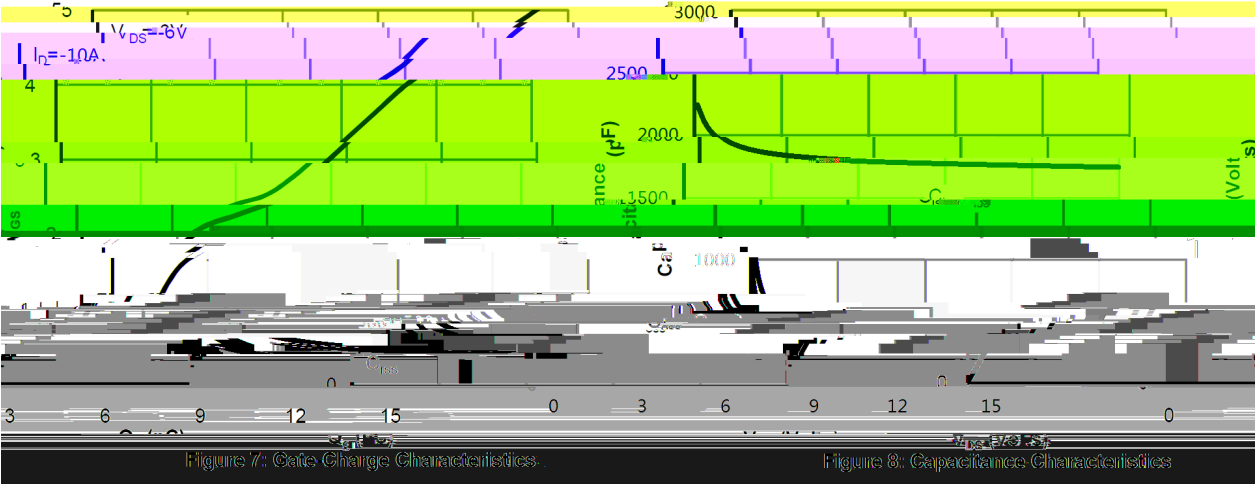
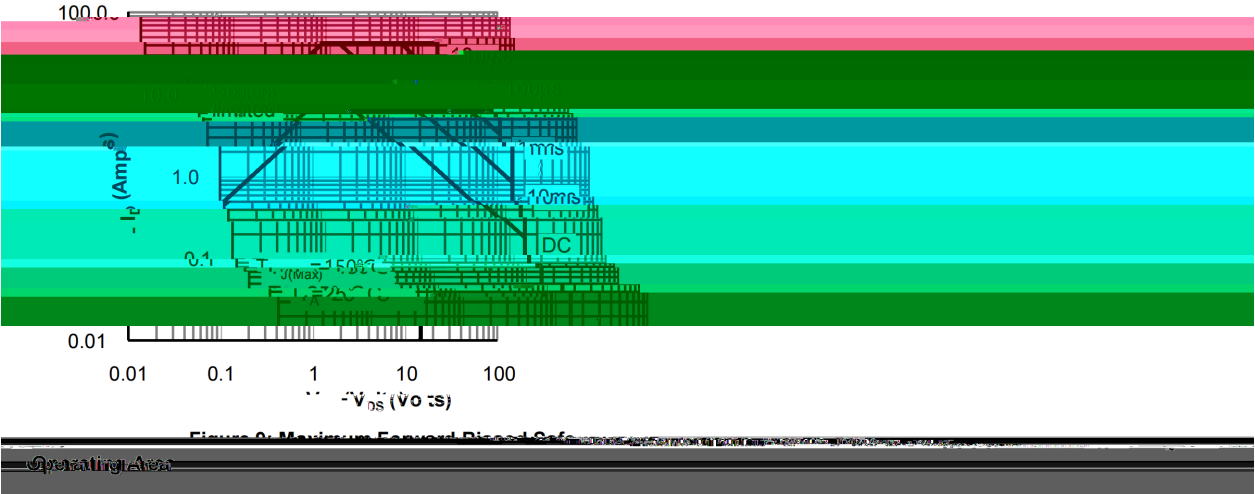
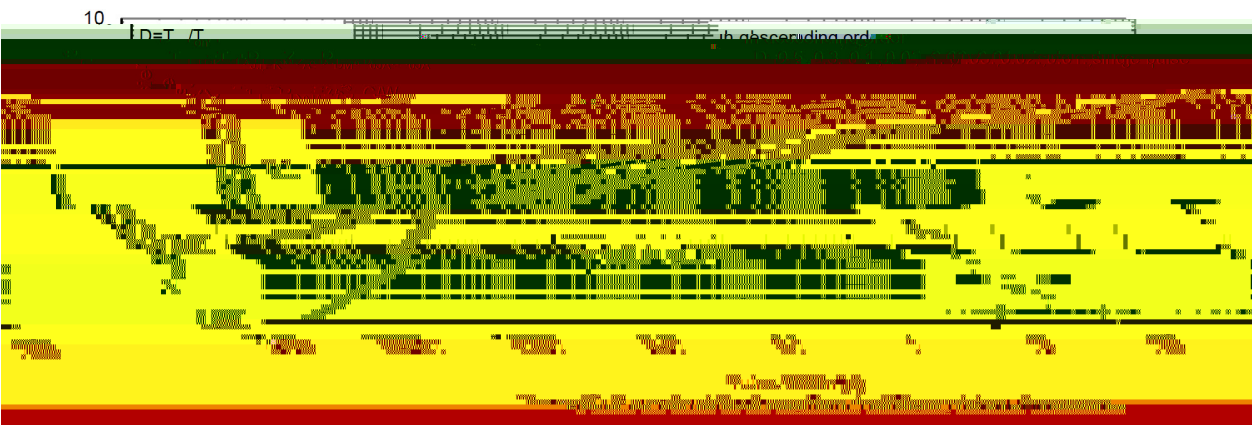
Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V _{DSS}	-16	V
Gate-Source Voltage		V _{GSS}	±10	V
Continuous Drain Current		I _D (T _a =25 °C)	-12	A
Pulsed Drain Current		I _{DM}	-42	A
Power Dissipation for Single Operation		P _D (T _a =25 °C)	3.0	W
Maximum Junction Temperature		T _j	150	
Storage Temperature Range		T _{stg}	-55 ~ 150	
Thermal Resistance-Junction to Ambient	t ≤ 10s	R _{θJA}	41.7	/W
	Steady State		75	/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	-19		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-16\text{V}$ $V_{GS}=0\text{V}$			-1.0	μA
Gate-Body leakage current	I_{GSS}	$V_{DS}=0\text{V}$ $V_{GS}=\pm 10\text{V}$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=-250\mu\text{A}$	-0.3	-0.7	-1.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS}=-4.5\text{V}$ $I_D=-10\text{A}$		13	15	m
		$V_{GS}=-2.5\text{V}$ $I_D=-5\text{A}$		18	25	
Diode Forward Voltage	V_{SD}	$I_S=-1\text{A}$ $V_{GS}=0\text{V}$			-1.2	V
Gate resistance	R_g	$V_{GS}=0\text{V}$, $V_{DS}=0\text{V}$, $f=1\text{MHz}$		10		
Input Capacitance	C_{iss}	$V_{GS}=0\text{V}$ $V_{DS}=-8\text{V}$ $f=1\text{MHz}$		1750		pF
Output Capacitance	C_{oss}			300		
Reverse Transfer Capacitance	C_{rss}			250		
Total Gate Charge	Q_g	$V_{GS}=-4.5\text{V}$ $V_{DS}=-6\text{V}$ $I_D=-10\text{A}$		13		nC
Gate-Source Charge	Q_{gs}			1.9		
Gate-Drain Charge	Q_{gd}			3.5		



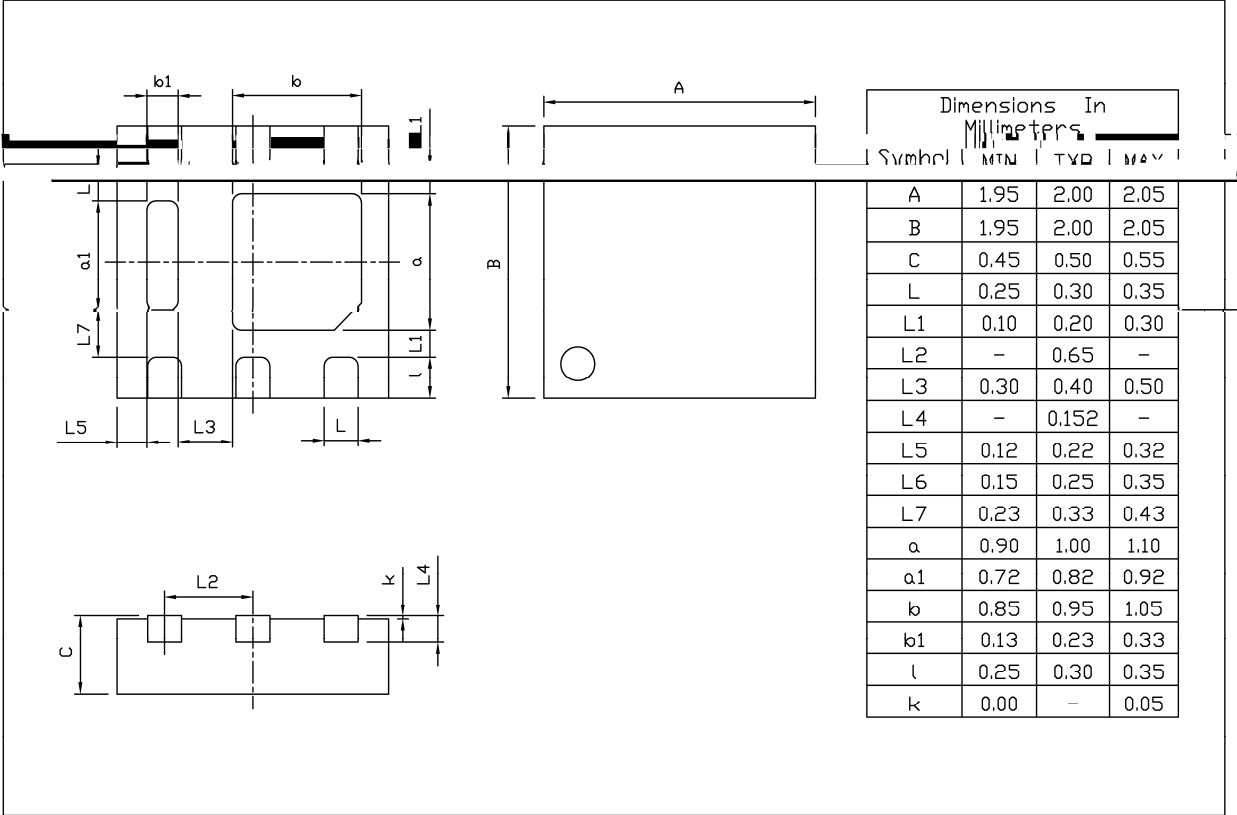
/ Electrical Characteristic Curve



/ Package Dimensions

DFN2 X2B-6L-0.5

Unit:mm



Rev.01 202006

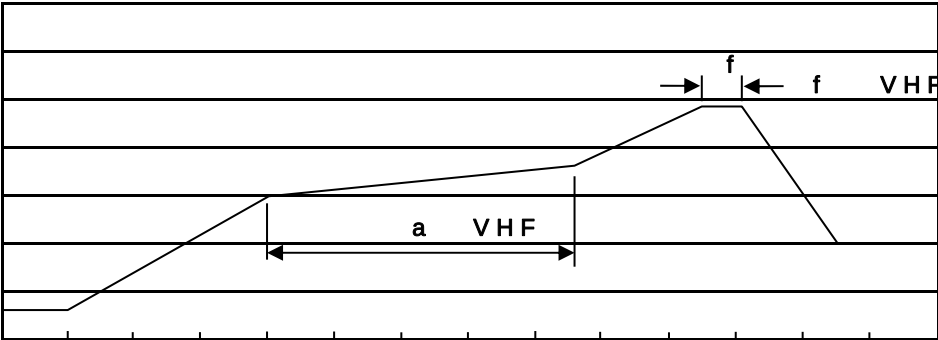
, M y f / Marking Instructions

BR
150P016

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BR y , [W A
150P016 y ° Z W A
**** y ¨ D Z W A k š ¨ D Z J
Note:
BR: Company Code
150P016: Product Type Code
****: Lot No. Code, code change with Lot No

šWD t...•Žč (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6

7HPSHUDWXUH



7LPH VHF

a ç y

- 10• Ä ½ “† 150 ½180 - k ž • 60 ½90sec;
- 20• Q > “† 245 r5 - k ž • 4 Ò 5 r0.5sec;
- 30•D N ò i Ò 0 ,† 2 ½10 - /sec.

Note:

- 1.Preheating:150~180 - , Time:60~90sec.
- 2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.
- 3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“† y 260 r5 - ž • y 10 r1 sec. Temp.:260±5 Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û H					Dimension ;>û p . (unit Åmm³)		
	Units/Reel /-	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç	Units/Outer Box /1ç	Reel	Inner Box	Outer Boxç
DFN2×2B-6L	4,000	10	40,000	4	160,000	7!v ×8	210×205×205	445×435×230

„Đ y f / Notices