

## 描述

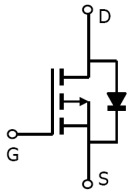
## 特征

$V_{DS} (V) = -16V$      $I_D = -12A$   
 $R_{DS(ON)}@-4.5V \leq 14m\Omega$  (Type. 12.6m $\Omega$ )  
 $R_{DS(ON)}@-2.5V \leq 25m\Omega$  (Type. 17.0m $\Omega$ )  
 $R_{DS(ON)}@-1.8V \leq 100m\Omega$  (Type. 23.5m $\Omega$ )  
 HF Product.

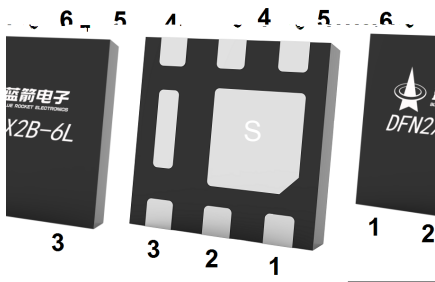
## 用途

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

## 内部等效电路



## 引脚排列



出脚	定义
Pin1	D
Pin2	D
Pin3	G
Pin4	S
Pin5	D
Pin6	D

## 印章代码

See Marking Instructions.

**极限参数**

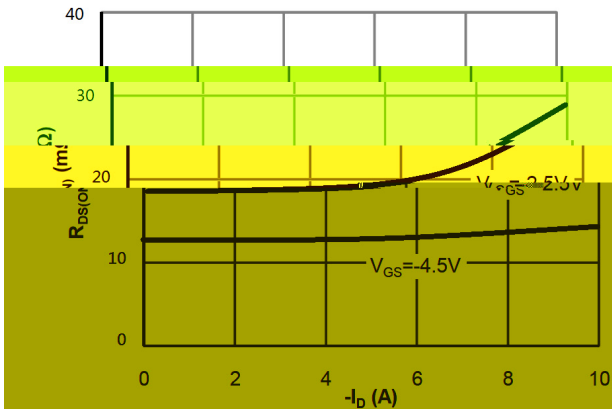
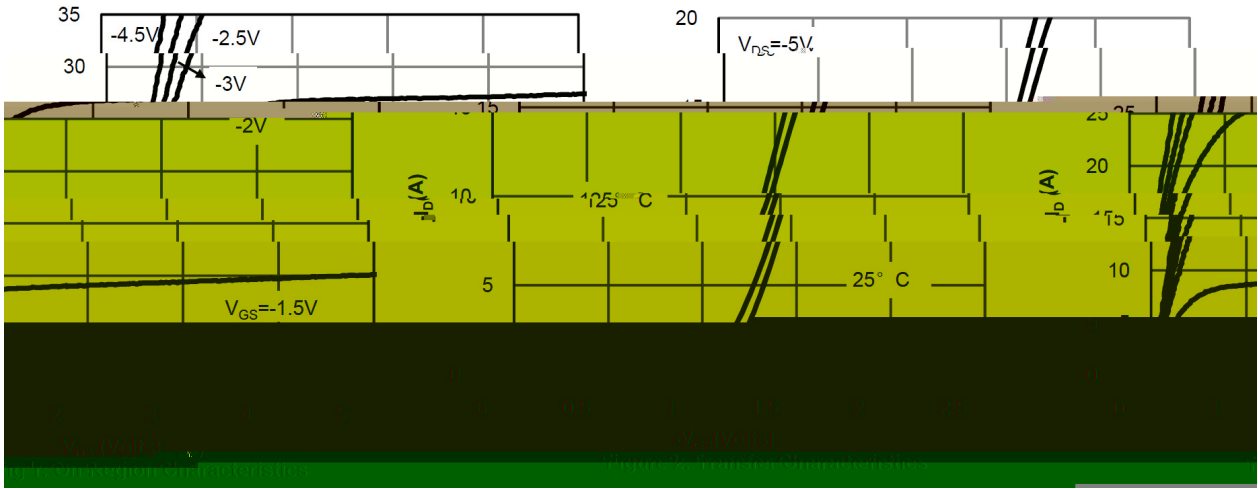
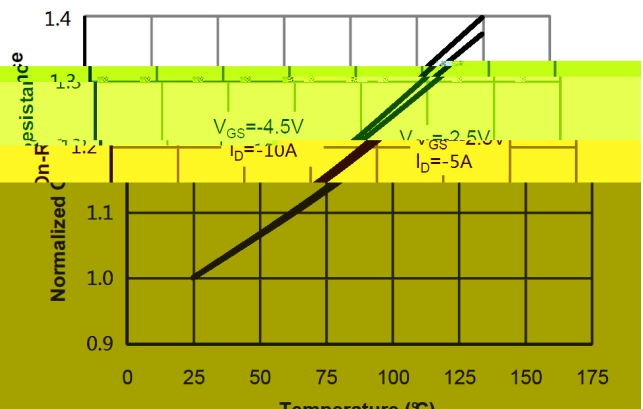
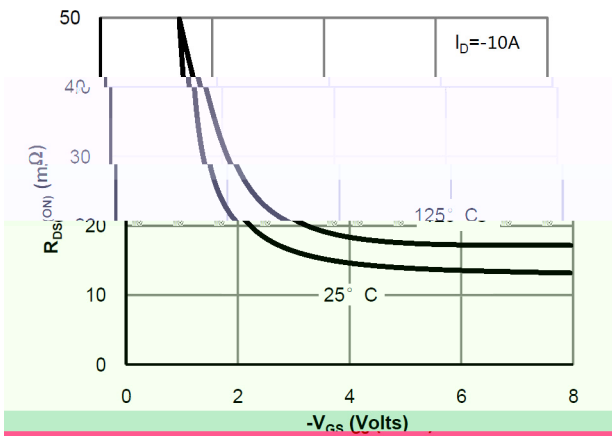
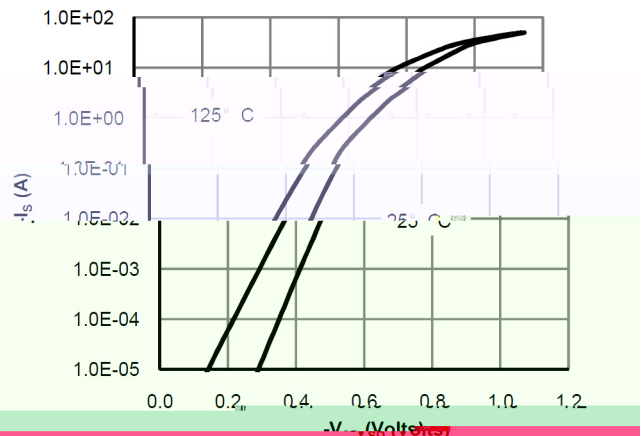
°C

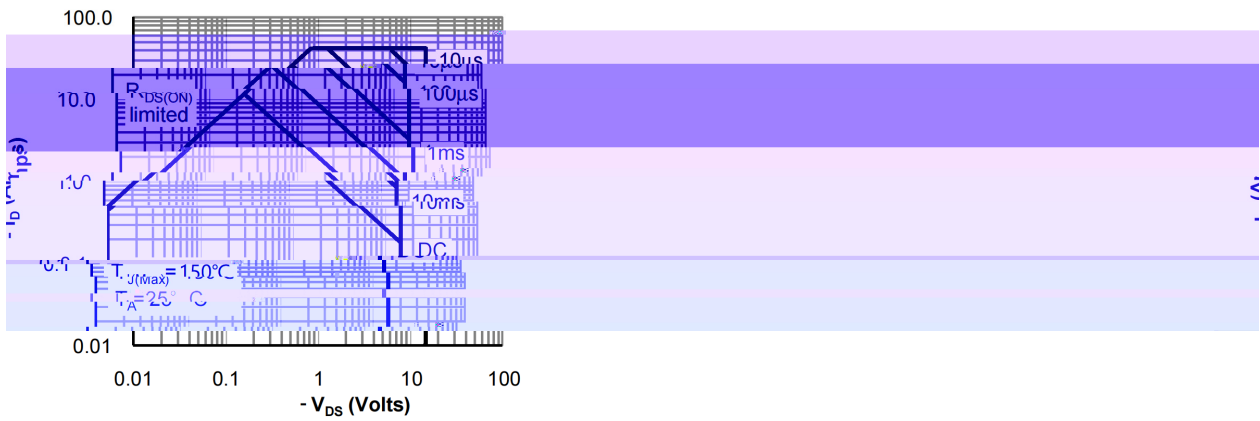
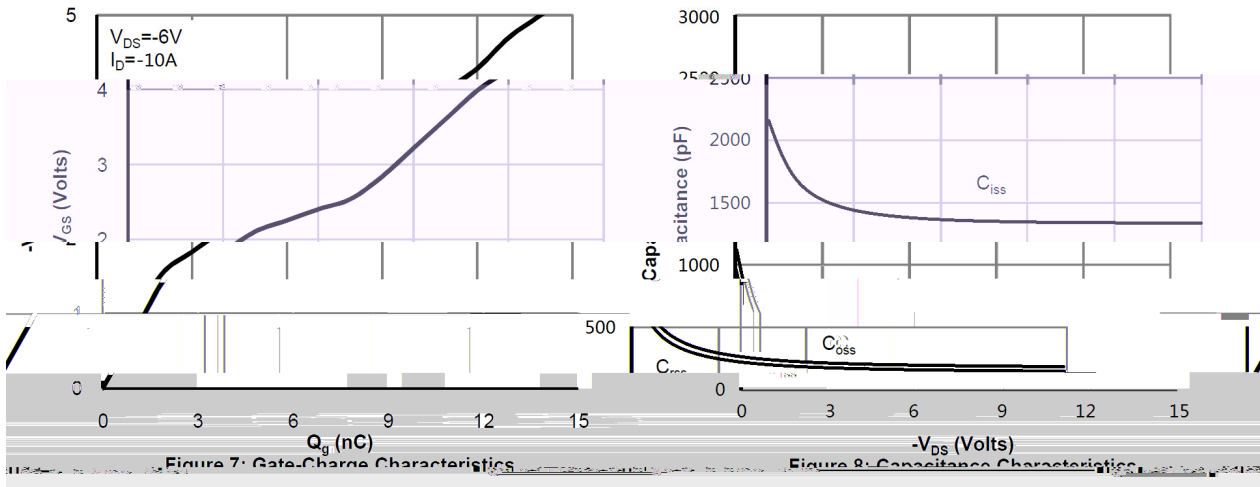
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DSS}$	-16	V
Gate-Source Voltage	$V_{GSS}$	±10	V
Continuous Drain Current	$I_D$	-12	A
Pulsed Drain Current	$I_{DM}$	-42	A
Power Dissipation for Single Operation	$P_D$	3.0	W
Maximum Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	
Thermal Resistance-Junction to Ambient	$R_{\theta JA}$	41.7	/W

**电性能参数**

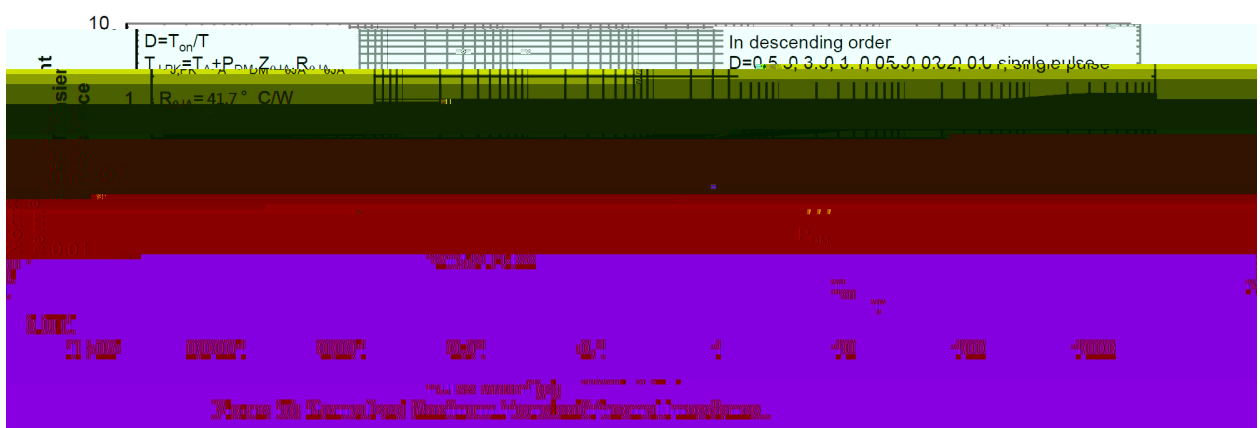
°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	$BV_{DSS}$	$I_D=-250\mu A$ $V_{GS}=0V$	-16	-19		V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=-16V$ $V_{GS}=0V$			-1.0	$\mu A$
Gate-Body leakage current	$I_{GSS}$	$V_{DS}=0V$ $V_{GS}=\pm 10V$			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=-250\mu A$	-0.3	-0.7	-1.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS}=-4.5V$ $I_D=-10A$		12.6	14	m
		$V_{GS}=-2.5V$ $I_D=-5A$		17.0	25	
		$V_{GS}=-1.8V$ $I_D=-5A$		23.5	100	
Diode Forward Voltage	$V_{SD}$	$I_S=-1A$ $V_{GS}=0V$			-1.2	V
Gate resistance	$R_g$	$V_{GS}=0V$ , $V_{DS}=0V$ , $f=1MHz$		10.3		
Input Capacitance	$C_{iss}$	$V_{GS}=0V$ $V_{DS}=-8V$ $f=1MHz$		1365		pF
Output Capacitance	$C_{oss}$			220		
Reverse Transfer Capacitance	$C_{rss}$			180		
Total Gate Charge	$Q_g$	$V_{GS}=-4.5V$ $V_{DS}=-10V$ $I_D=-8A$		14.1		nC
Gate-Source Charge	$Q_{gs}$			1.3		
Gate-Drain Charge	$Q_{gd}$			3.1		
Turn-on Delay Time	$t_{d(ON)}$	$V_{GS}=-4.5V$ $V_{DS}=-10V$ $I_D=-8A$ $R_g=3$		12.2		ns
Turn-on Rise Time	$t_r$			60.6		
Turn-off Delay Time	$t_{d(OFF)}$			68.6		
Turn-off Fall Time	$t_f$			41.7		

**电参数曲线图**

**Figure 3: On-Resistance vs. Drain Current and Gate Voltage**

**Figure 4: On-Resistance vs. Junction Temperature**

**Figure 5: On-Resistance vs. Gate-Voltage at Drain**

**Figure 6: Source Current vs. Gate-Voltage**

**电参数曲线图 /**


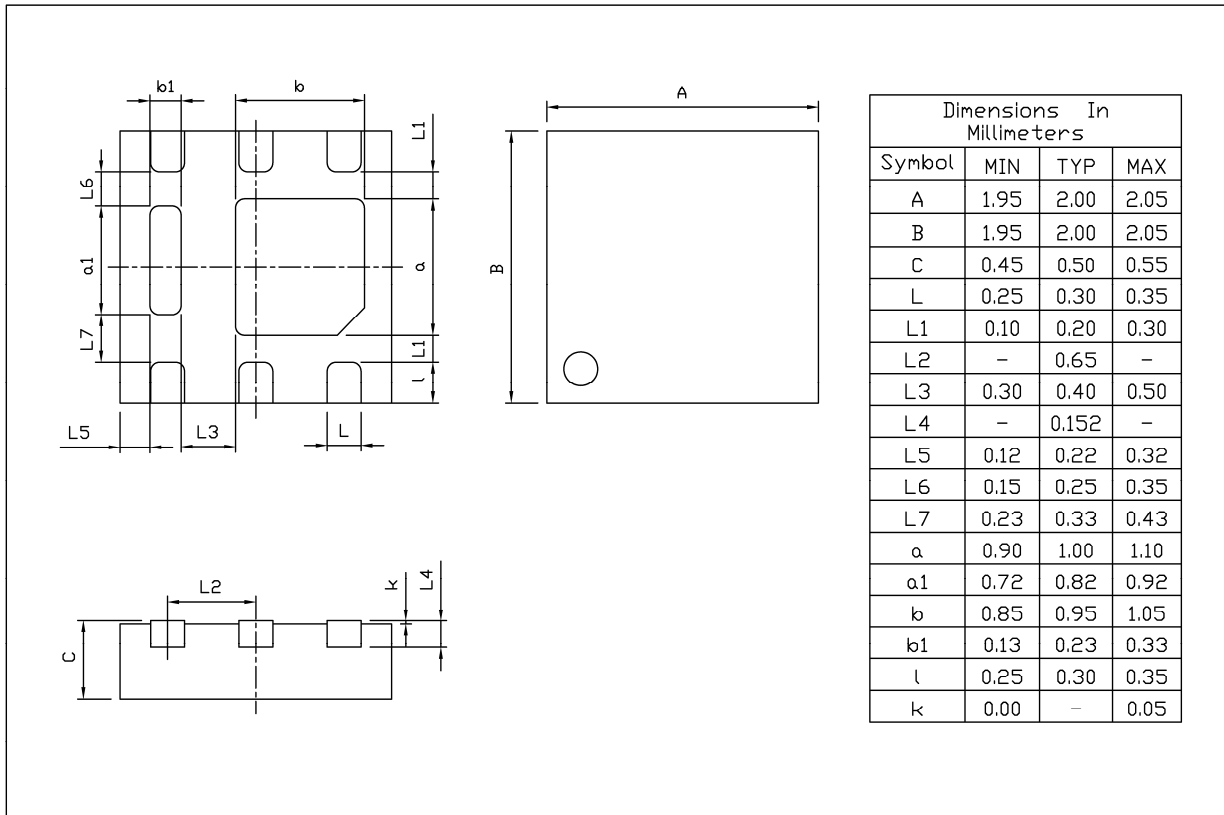
Operating Area



**外形尺寸图**

DFN2 x2B-6L-0.5

Unit:mm



Rev.01 202006

印章说明



BR

130P016

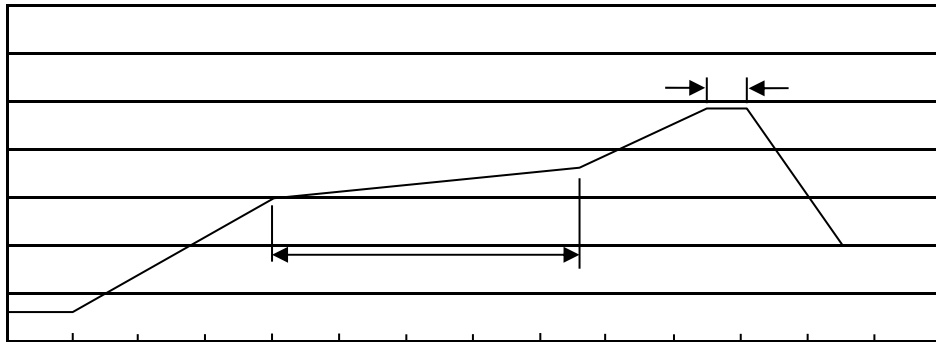
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Note:

BR: Company Code

130P016: Product Type Code

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

**回流焊温度曲线图 无铅      Temperature Profile for IR Reflow Soldering(Pb-Free)**


Note:

- |   |         |           |   |
|---|---------|-----------|---|
| 1 | 150 180 | 60 90sec; | 1.Preheating:150~180 , Time:60~90sec.   |
| 2 | 245 5   | 5 0.5sec; | 2.Peak Temp.:245 5 , Duration:5 0.5sec. |
| 3 | 2 10    | /sec.     | 3. Cooling Speed: 2~10 /sec.            |

**耐焊接热试验条件**

260 5	10 1 sec.	Temp.:260±5	Time:10±1 sec
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**包装规格**

/ REEL

Package Type	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
DFN2×2B-6L	4,000	10	40,000	4	160,000	7 ×8	210×205×205	445×435×230

**使用说明**

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