

BRCS150P02ZJ

Rev.B Jul.-2024

/ Descriptions

DFN 2×2B-6L P MOS

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

/ Features

$V_{DS} (V) = -20V$ $I_D = -12A$

$R_{DS(ON)} @ -4.5V$ $17m\Omega$ (Type. $14.5m\Omega$)

$R_{DS(ON)} @ -2.5V$ $25m\Omega$ (Type. $18m\Omega$)

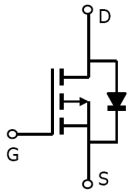
$R_{DS(ON)} @ -1.8V$ $38m\Omega$ (Type. $24.5m\Omega$)

HF Product.

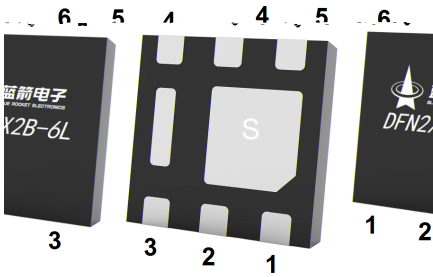
/ Applications

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

/ Equivalent Circuit



/ Pinning



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

/ Marking

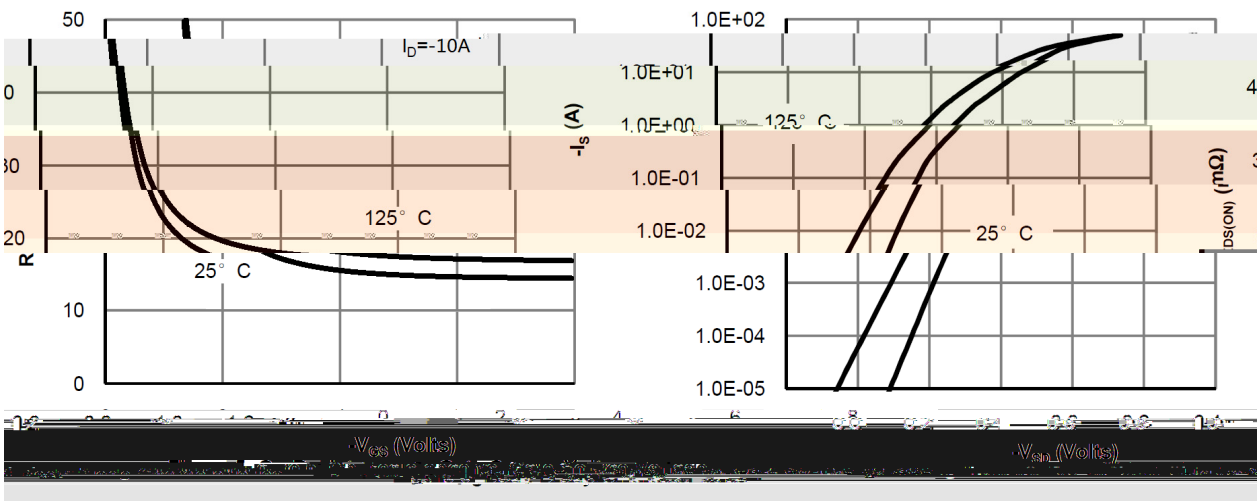
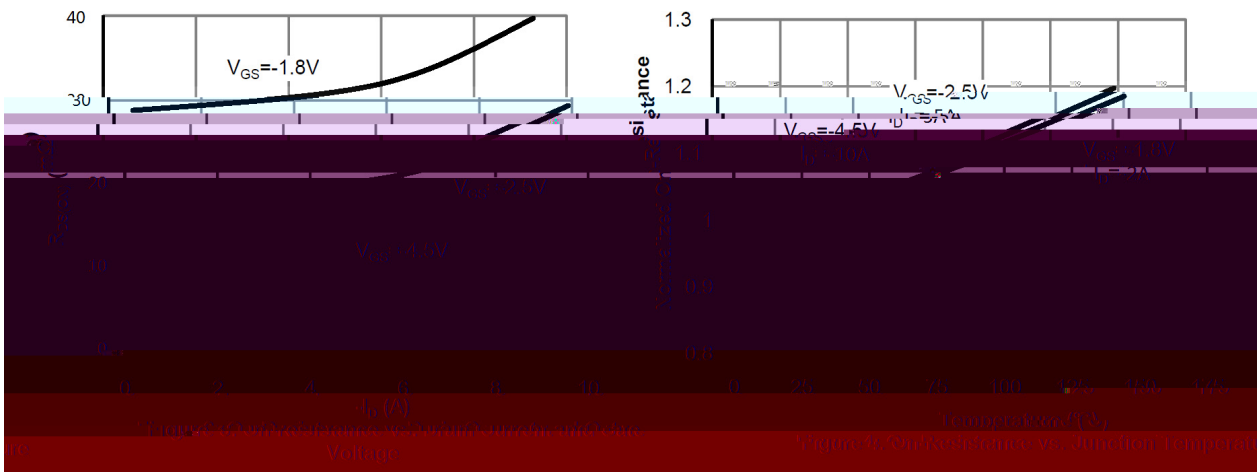
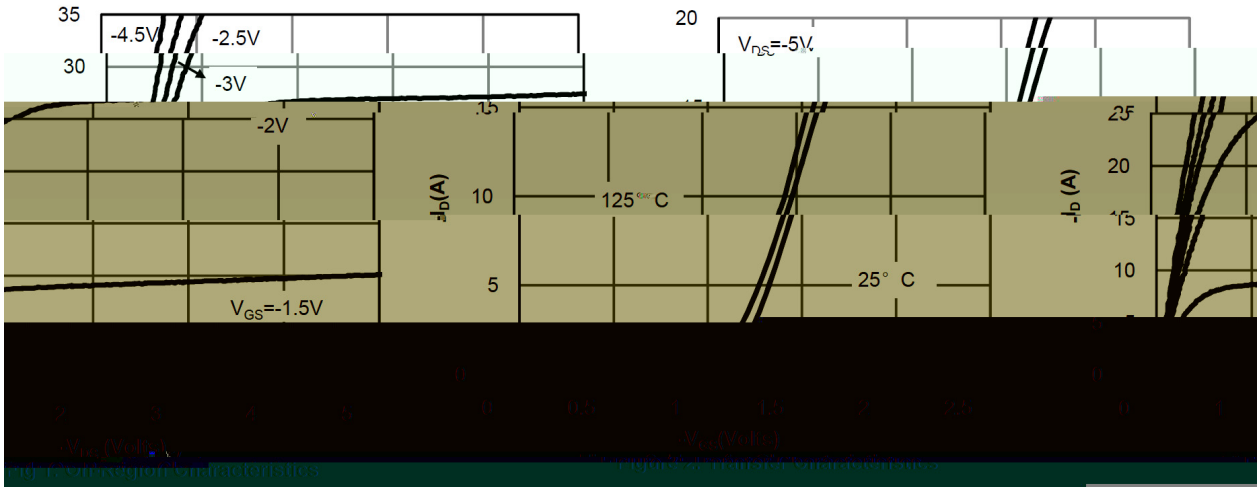
See Marking Instructions.

/ Absolute Maximum Ratings($T_a=25$)

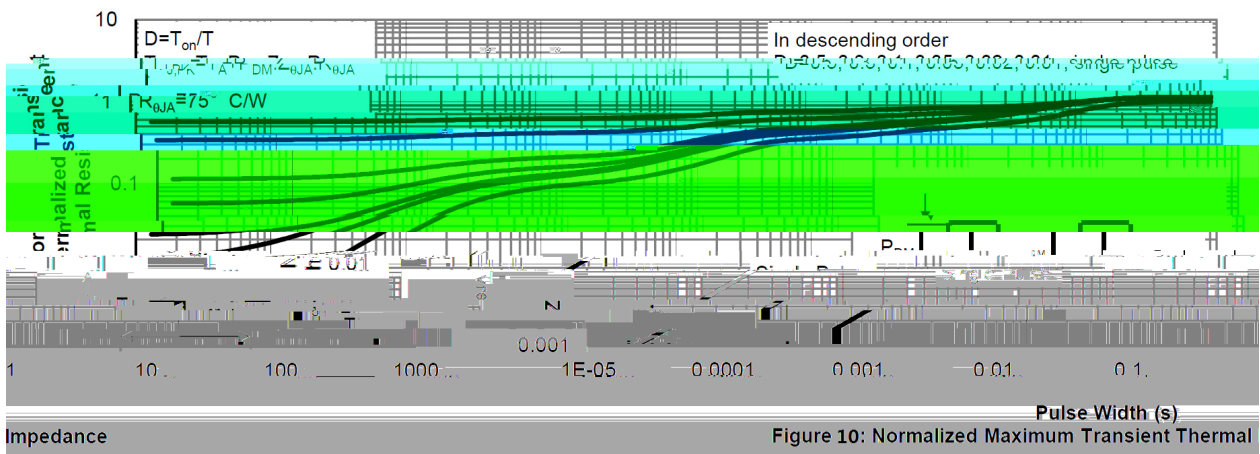
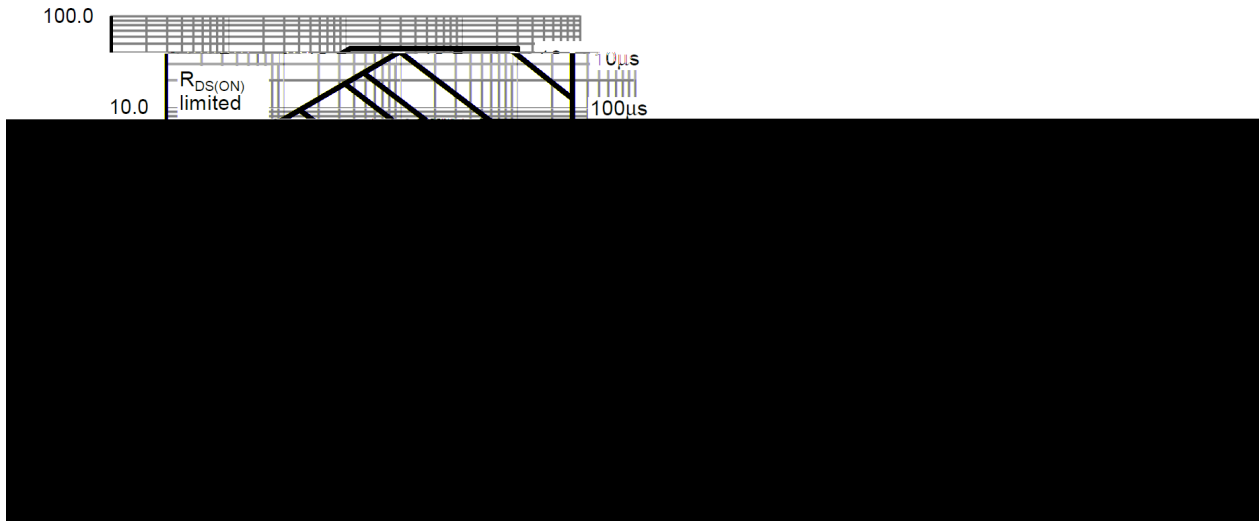
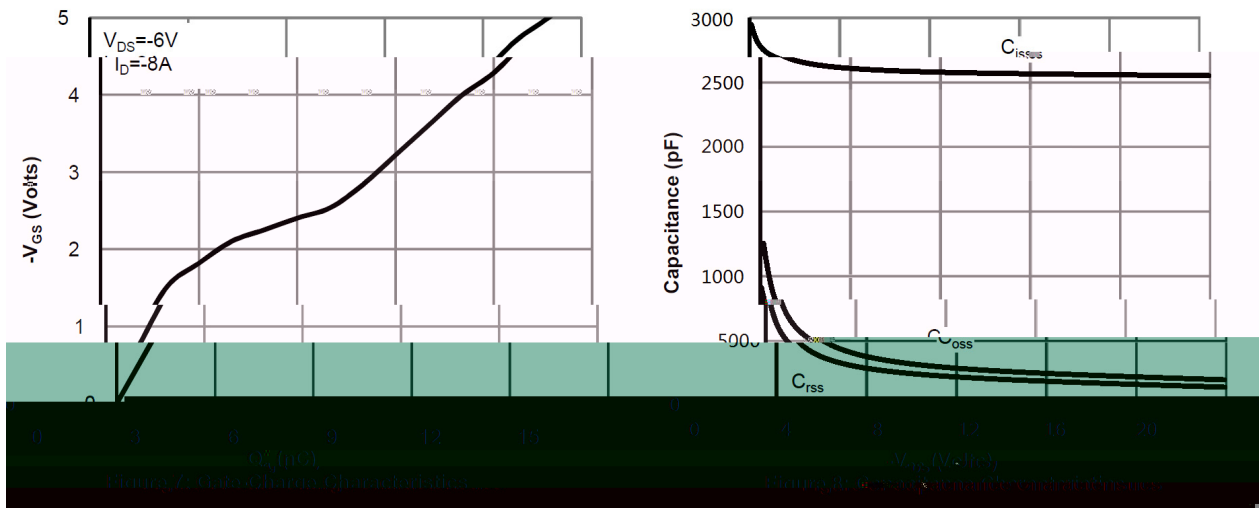
Parameter	Symbol	Rating	Unit	
Drain-Source Voltage	V_{DSS}	-20	V	
Gate-Source Voltage	V_{GSS}	± 12	V	
Continuous Drain Current	$I_D (T_a=25^\circ\text{C})$	-12	A	
Pulsed Drain Current	I_{DM}	-44	A	
Avalanche Current	I_{AS}	-13	A	
Avalanche energy $L=0.5\text{mH}$	E_{AS}	59	mJ	
Power Dissipation for Single Operation	$P_D (T_a=25)$	3.0	W	
Maximum Junction Temperature	T_j	150	$^\circ\text{C}$	
Storage Temperature Range	T_{stg}	-55 150	$^\circ\text{C}$	
Thermal Resistance-Junction to Ambient	t 10s	$R_{\theta JA}$	40	$^\circ\text{C/W}$
	Steady State		75	$^\circ\text{C/W}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
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/ Electrical Characteristic Curve



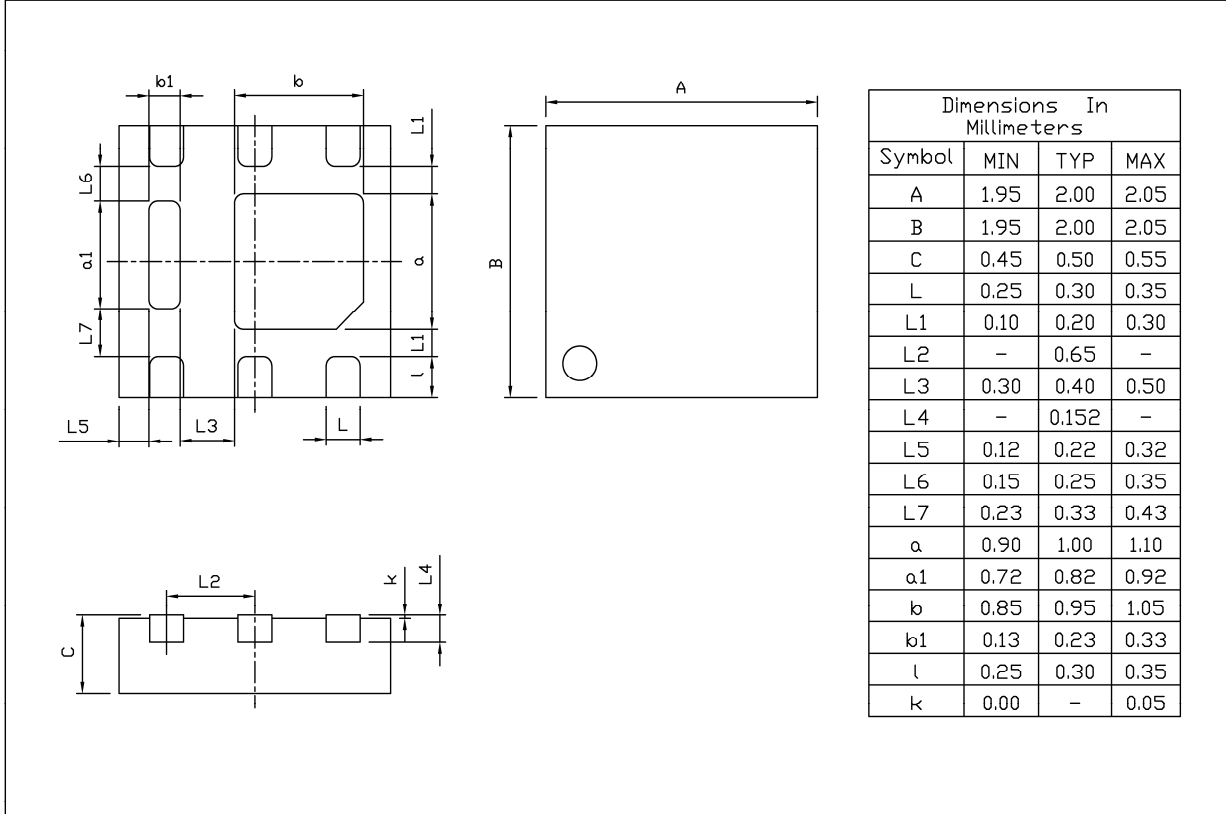
/ Electrical Characteristic Curve



/ Package Dimensions

DFN2 X2B-6L-0.5

Unit:mm



Rev.01 202006

/ Marking Instructions



BR

150P02

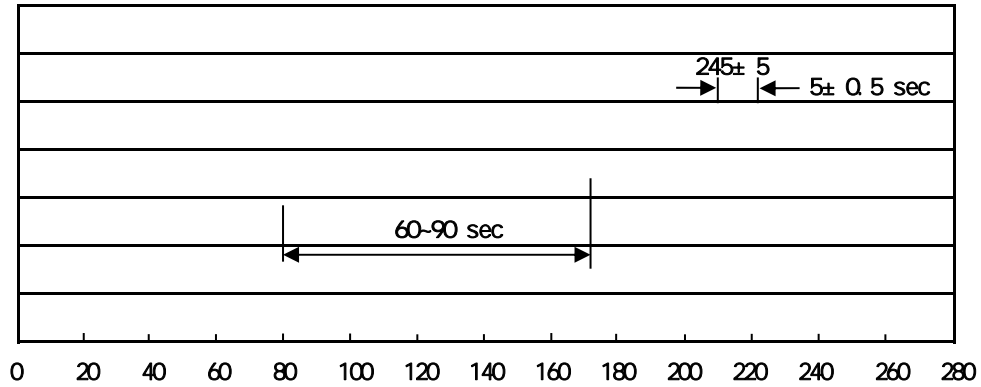
Note:

BR: Company Code

150P02: Product Type Code

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

() / 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 ± 0.5 sec; | 2.Peak Temp.: 245 ± 5 , Duration: 5 ± 0.5 sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260 ± 5 10 ± 1 sec. Temp.: $260 \pm 5^\circ\text{C}$ Time: 10 ± 1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
DFN2x2B-6L	4,000	10	40,000	4	160,000	7 x8	210x205x205	445x435x230

/ Notices