

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

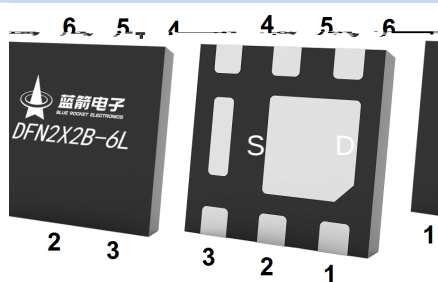
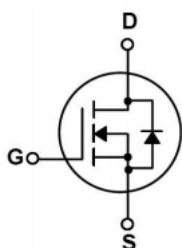
$V_{DS} (V) = 30V$ $I_D = 14.7A$ ($V_{GS} = \pm 20V$)

$R_{DS(ON)} @ 10V < 7m\Omega$ (Typ. $6.3m\Omega$)

$R_{DS(ON)} @ 4.5V < 12m\Omega$ (Typ. $9.5m\Omega$)

HF Product.

Suited for low voltage applications such as automotive, DC/DC Converters, and high efficiency switching for power management in portable and battery operated products.



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

See Marking Instructions.

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	30	V
Drain Current		I_D	14.7	A
Gate-Source Voltage		V_{GS}	± 20	V
Power Dissipation		$P_D(T_c=25^{\circ}\text{C})$	2.5	W
Junction Temperature Range		T_j	150	
Storage Temperature Range		T_{stg}	-55~150	
Maximum Junction-to-Ambient	$t \leq 10\text{s}$	$R_{\theta JA}$	50	/W
	Steady-State		75	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DS}	$V_{GS}=0\text{V}$ $I_D=250\mu\text{A}$	30	35		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=30\text{V}$ $V_{GS}=0\text{V}$			1	μA

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{DS}=15\text{ V}$ $V_{GS}=10\text{V}$ $R_L=0.75\Omega$ $R_{GEN}=3\Omega$		11		ns
Turn-On Rise Time	t_r			14		ns
Turn-Off Delay Time	$t_{d(off)}$			38		ns
Turn-Off Fall Time	t_f			10		ns

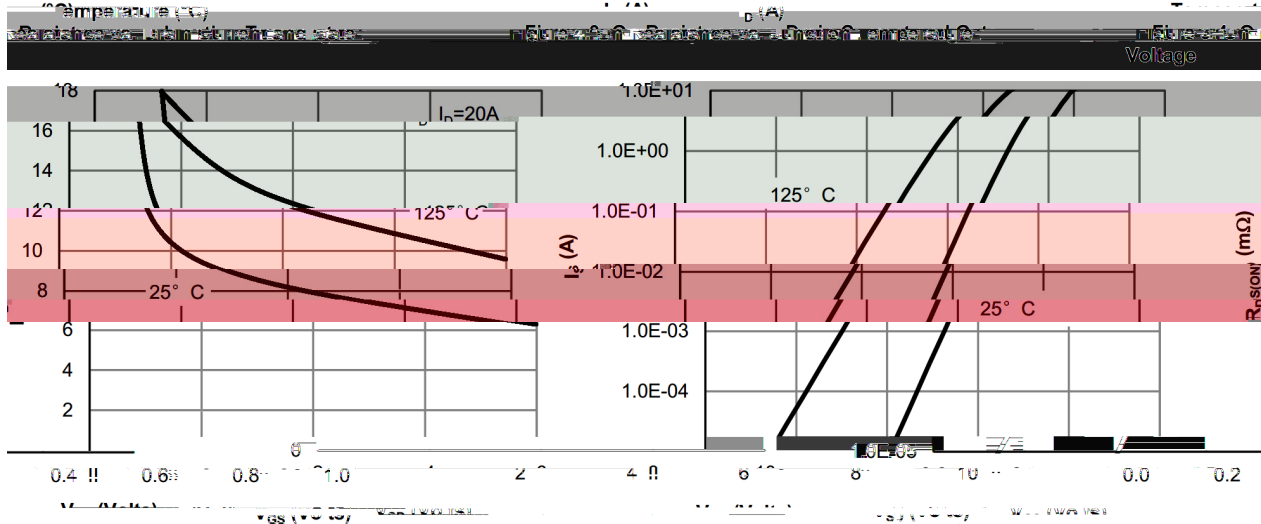
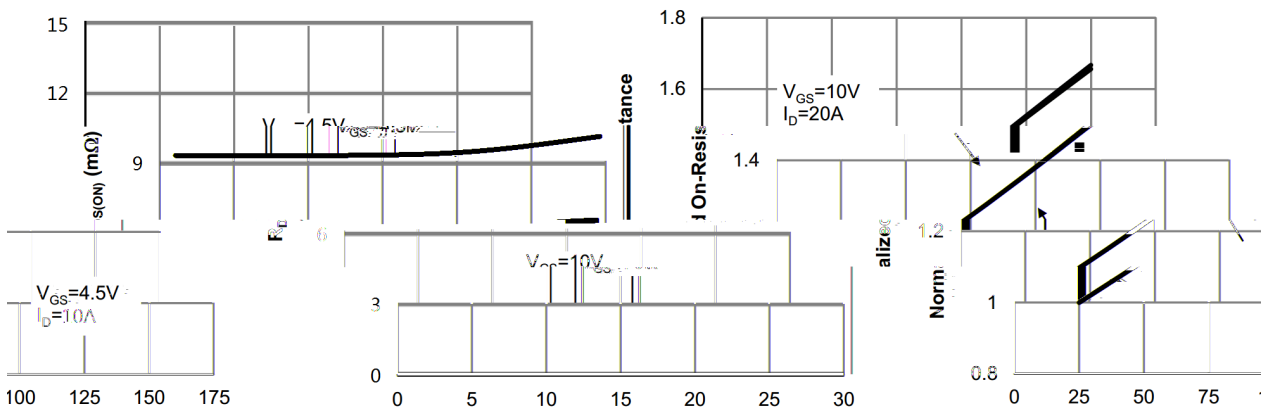
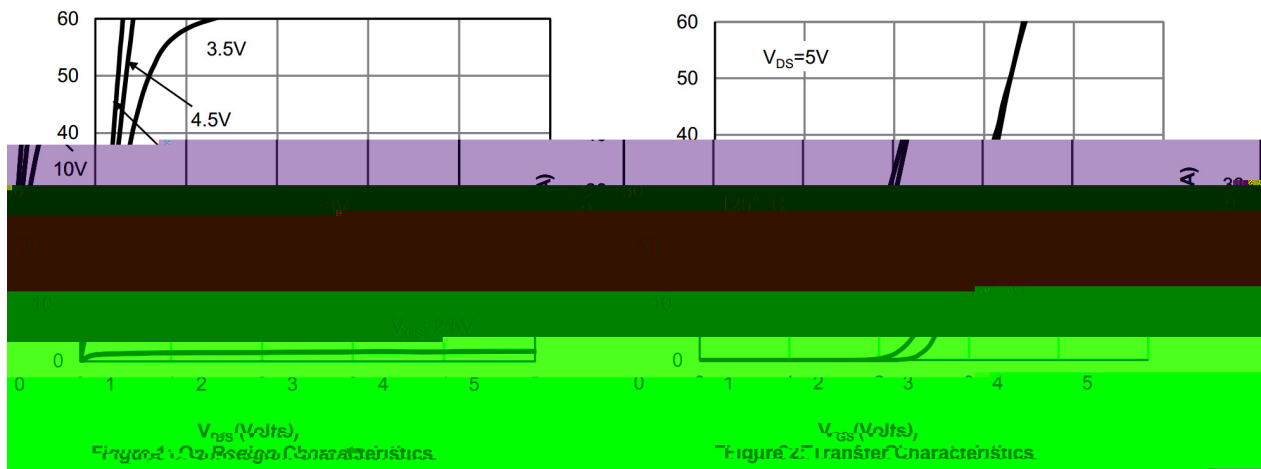
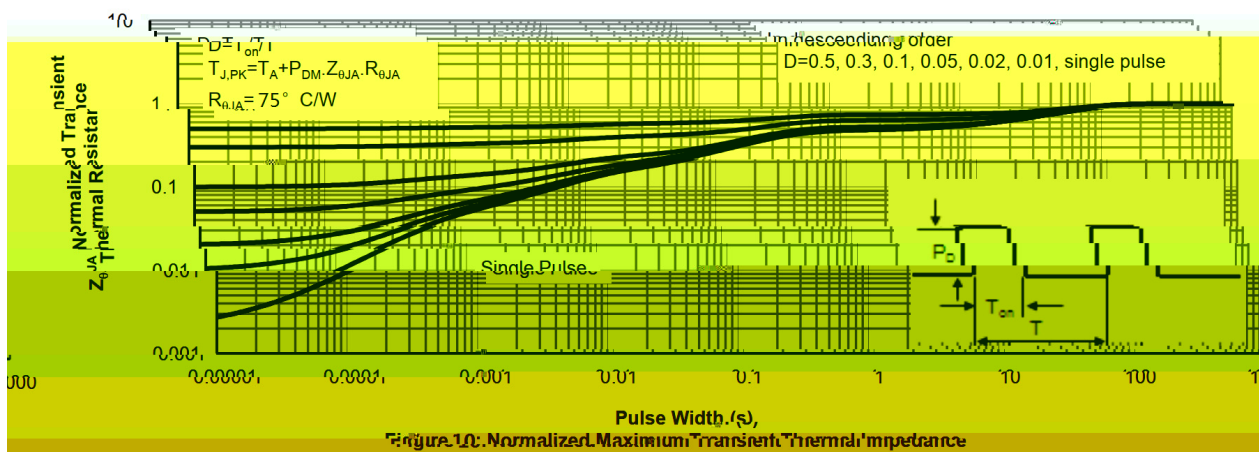
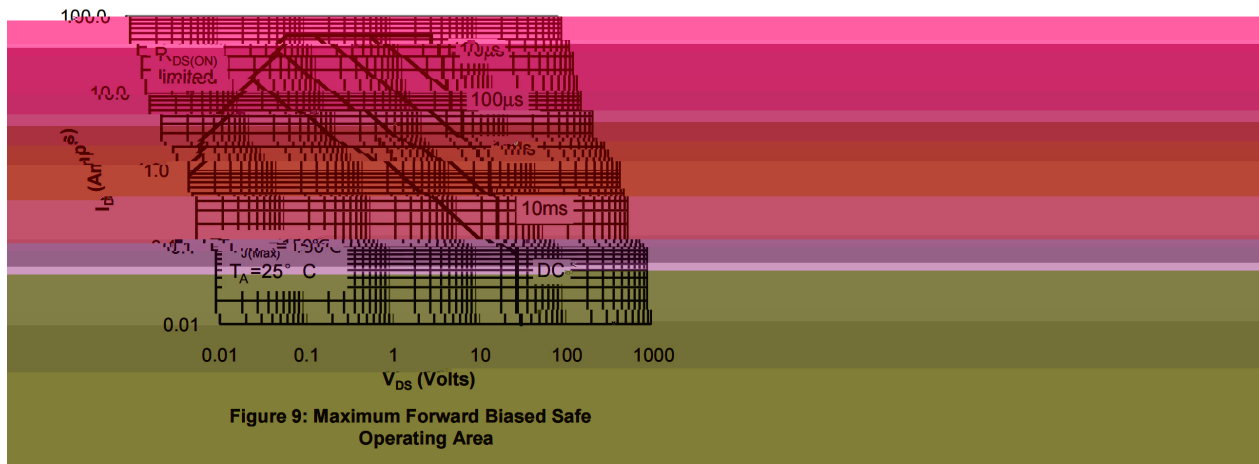
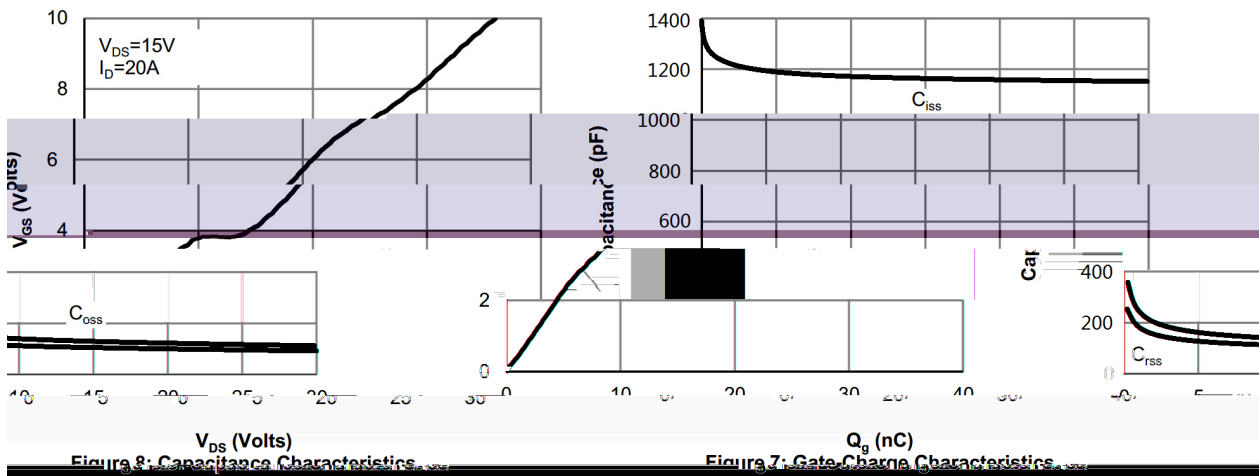


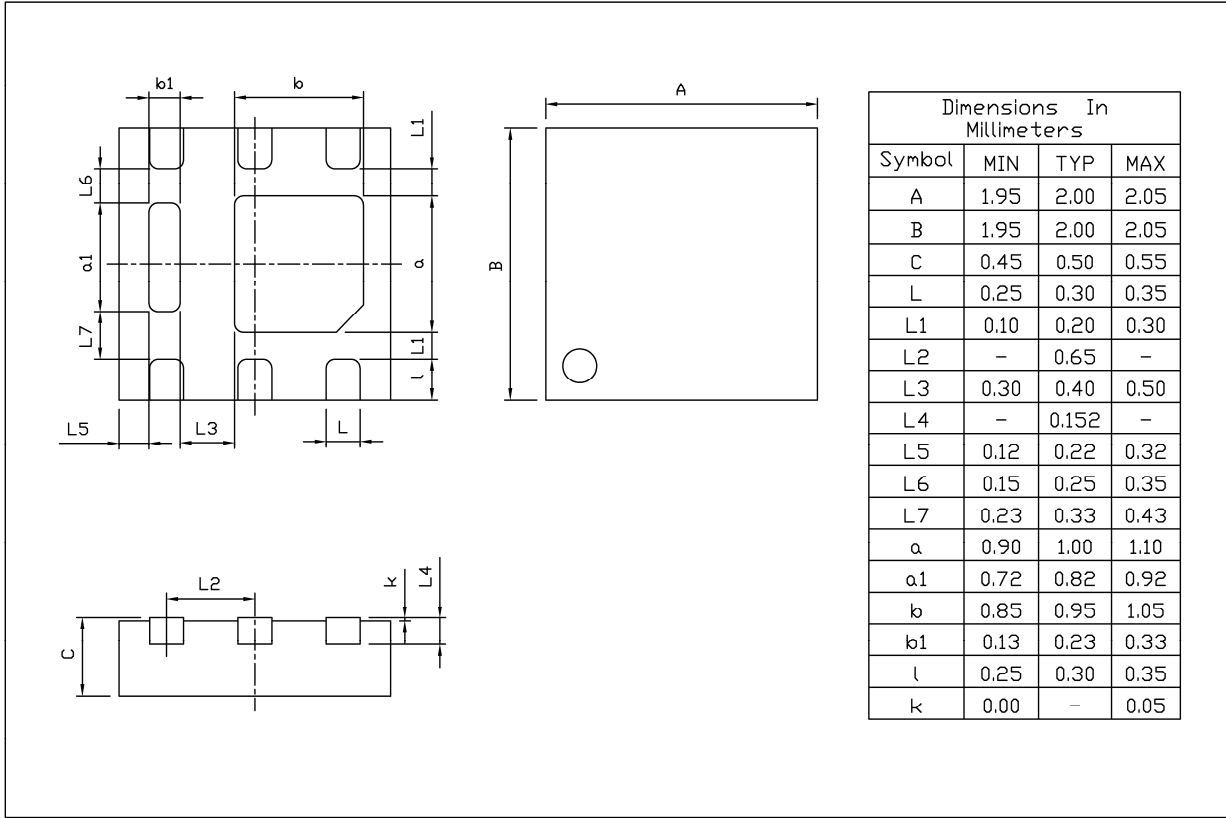
Figure 5: On-Resistance vs. Gate-Source Voltage

Figure 6: Body-Diode Characteristics

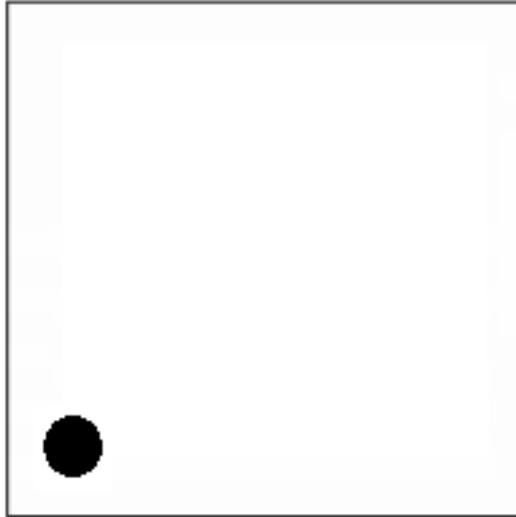


DFN2 ×2B-6L-0.5

Unit:mm



Rev.01 202006



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