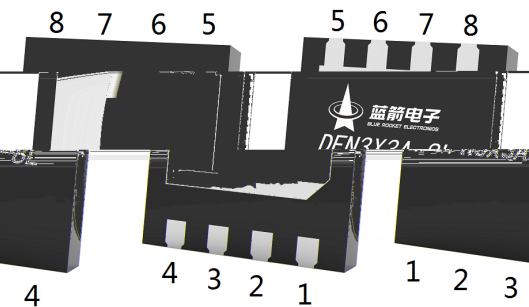
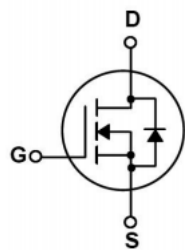


DFN3×3A-8L N MOS
N-Channel Enhancement Mode Field Effect Transistor in a DFN3×3A-8L Plastic Package.

$V_{DS} (V) = 20V$ $I_D = 43A (V_{GS} = \pm 12V)$
 $R_{DS(ON)}@10V \leq 10m\Omega (Typ. 8.0m\Omega)$
 $R_{DS(ON)}@4.5V \leq 11m\Omega (Typ. 9.5m\Omega)$
 $R_{DS(ON)}@2.5V \leq 16m\Omega (Typ. 14m\Omega)$
HF Product.

DC/DC

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



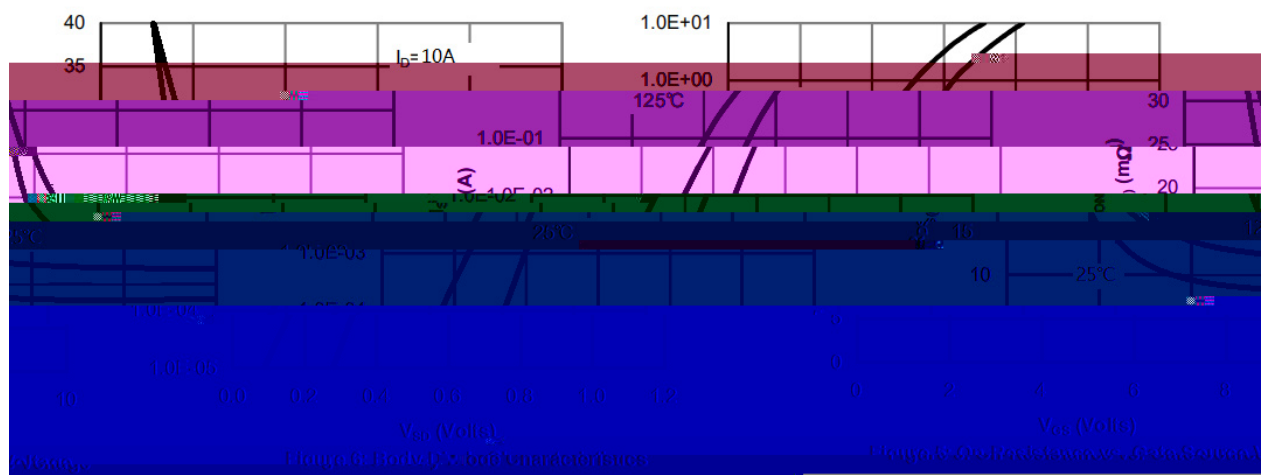
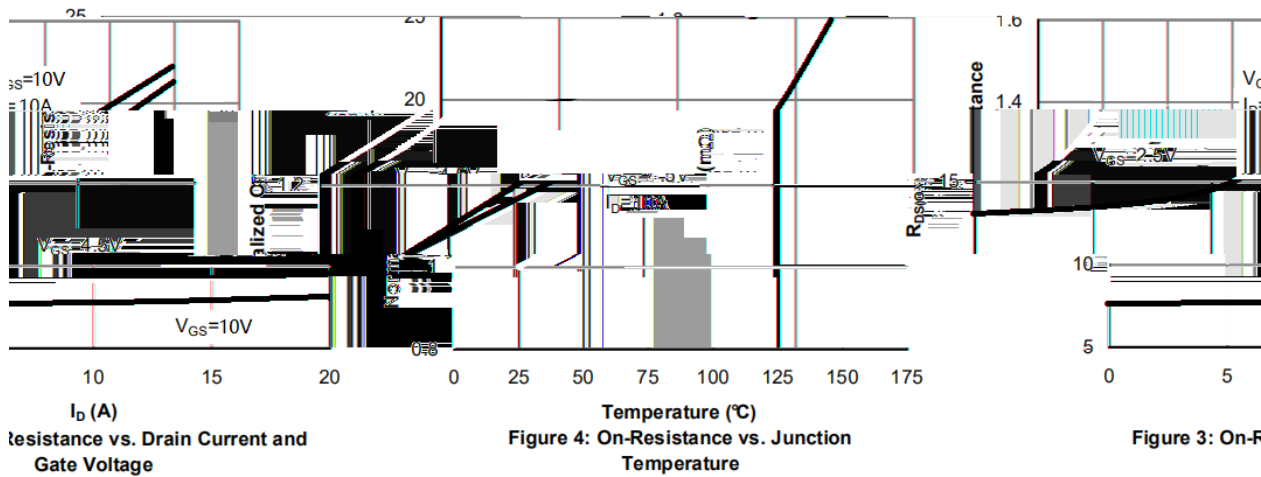
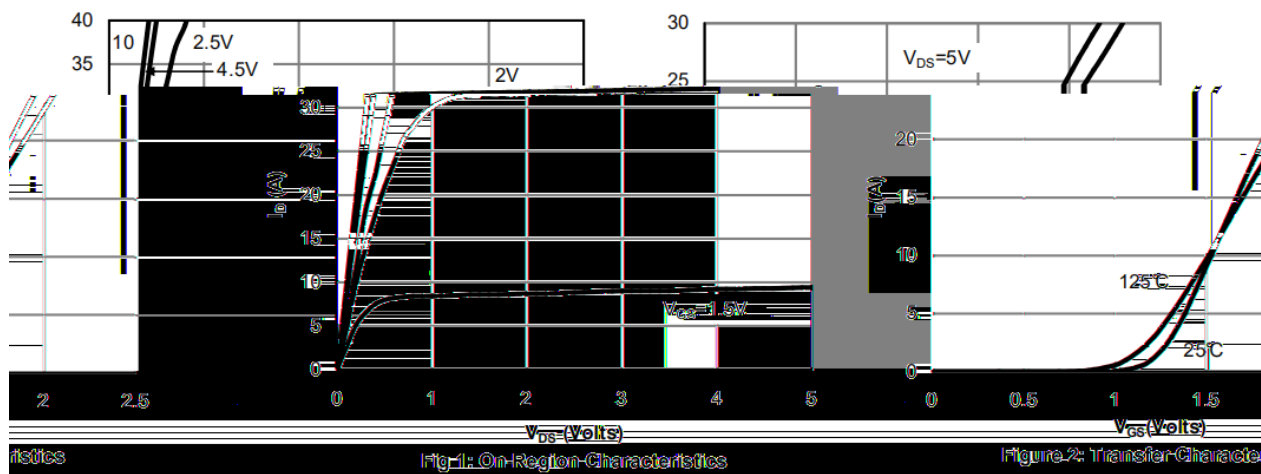
出脚	定义
Pin1	S
Pin2	S
Pin3	S
Pin4	G
Pin5	D
Pin6	D
Pin7	D
Pin8	D

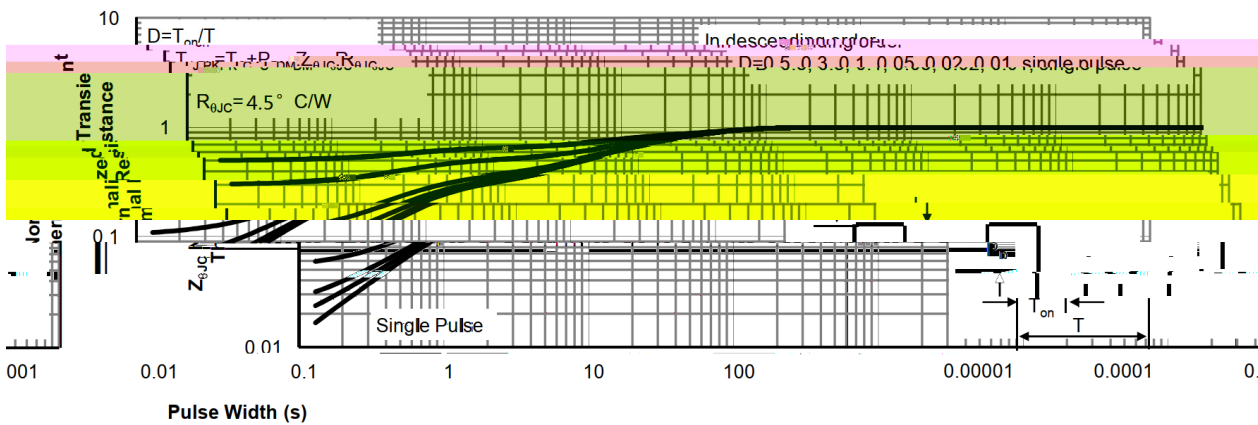
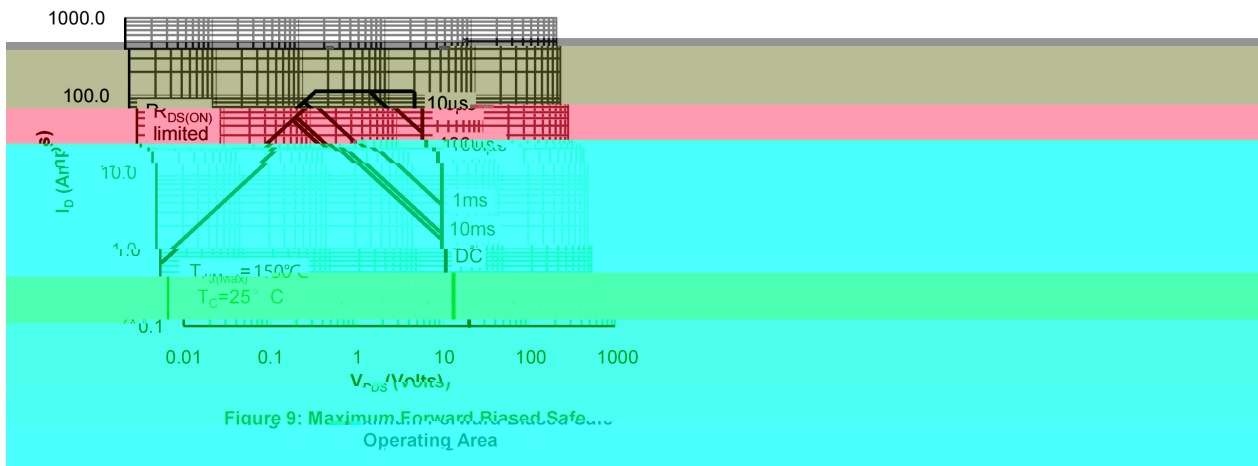
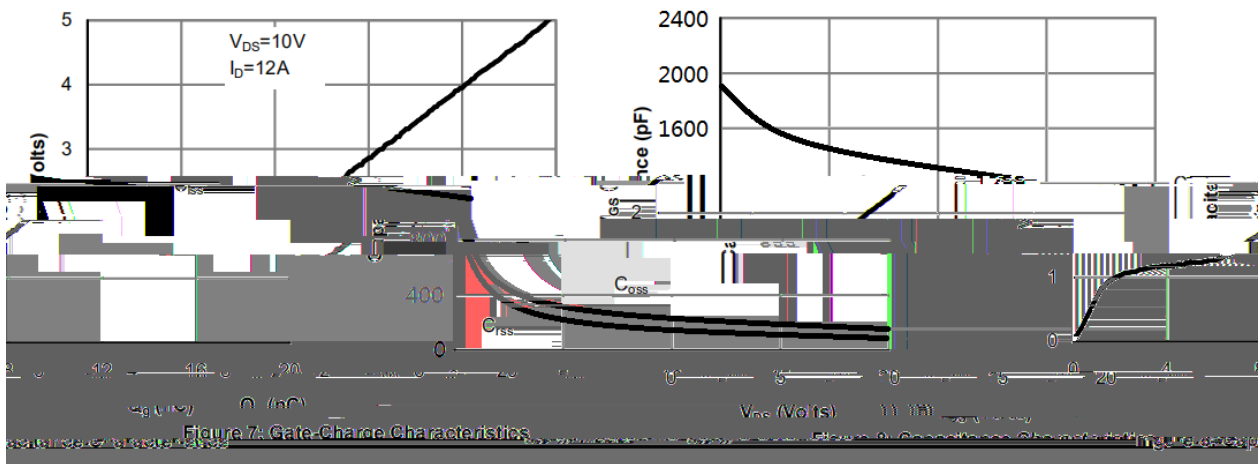
See Marking Instructions.

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	20	V
Drain Current		$I_D(T_C=25^\circ\text{C})$	43	A
Drain Current - Pulsed		I_{DM}	107	A
Gate-Source Voltage		V_{GS}	± 12	V
Avalanche Current		I_{AS}	12.5	A
Single Pulsed Avalanche Energy		E_{AS}	111	mJ
Power Dissipation		$P_D(T_C=25^\circ\text{C})$	28	W
Junction Temperature Range		T_J	150	
Storage Temperature Range		T_{stg}	-55 150	
Maximum Junction-to-Ambient	$t \leq 10s$	$R_{\theta JA}$	50	/W
	Steady-State		70	
Maximum Junction-to-Case	Steady-State	$R_{\theta JC}$	4.5	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	20	25		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=20V$ $V_{GS}=0V$			1.0	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 12V$ $V_{DS}=0V$			± 0.1	μA
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=10.0A$		8	10	m Ω
		$V_{GS}=4.5V$ $I_D=10.0A$		9.5	11	m Ω
		$V_{GS}=2.5V$ $I_D=10.0A$		14	16	m Ω
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	0.5	0.8	1.1	V
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$ $I_F=1.0A$		0.75	1.2	V
Signal Source Resistance	R_g	$F=1MHz$		2.7		Ω
Input Capacitance	C_{iss}	$V_{DS}=15V$ $V_{GS}=0V$ $f=1.0MHz$		1100		pF
Output Capacitance	C_{oss}			160		
Reverse Transfer Capacitance	C_{rss}			130		

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{DS}=10V$ $V_{GS}=10V$ $R_L=1.0\Omega$ $R_{GEN}=3.0\Omega$		2.5		ns
Turn-On Rise Time	t_r			7.2		
Turn-Off Delay Time	$t_{d(off)}$			49		
Turn-Off Fall Time	t_f			10.8		
Total Gate Charge	$Q_{g(4.5V)}$	$V_{DS}=10V$ $V_{GS}=4.5V$ $I_D=12.0A$		17.9		nC
Gate-Source Charge	Q_{gs}			1.5		
Gate-Drain Charge	Q_{gd}			4.7		

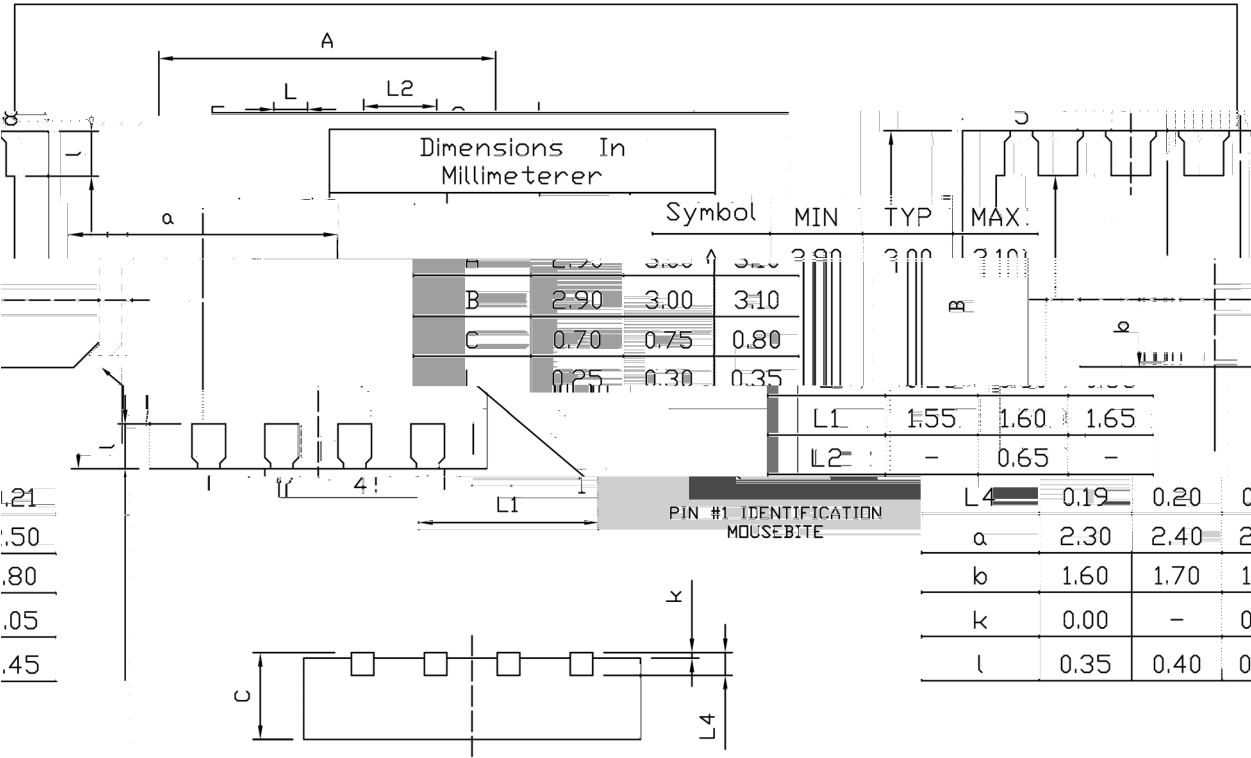




Figure

DFN3X3A-8L

Unit:mm



BR
080N02



BR

080N02

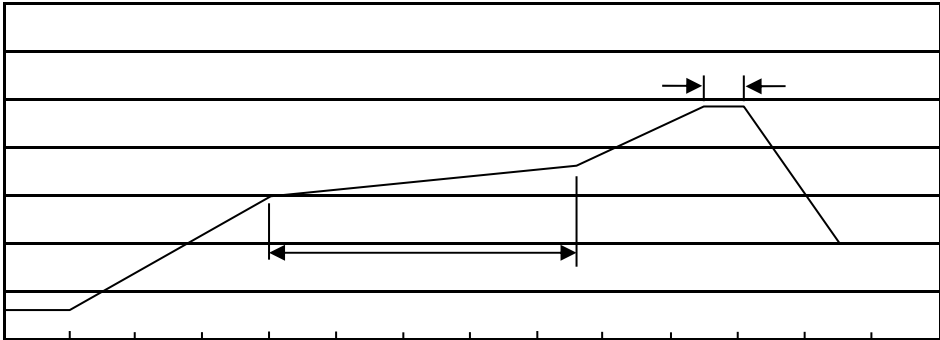
Note:

BR: Company Code

080N02: 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±0.5sec;

2.Peak Temp.:245±5 , Duration:5±0.5sec.
- 3

2 10

/sec.

3. Cooling Speed: 2~10 /sec.

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ 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
DFN3×3A-8L	5,000	2	10,000	6	60,000	13" ×12	360×360×50	380×335×366