

P-Channel Enhancement Mode Field Effect Transistor in a PDFN3 3A-8L Plastic Package.

$V_{DS} (V) = -30V$

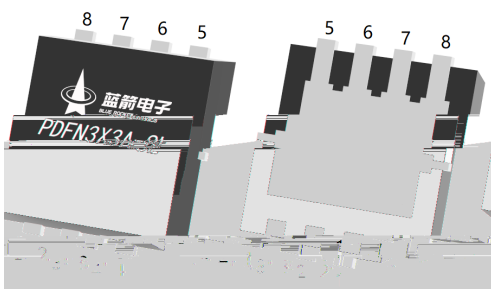
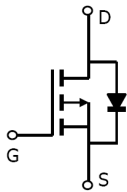
$I_D = -34 A (V_{GS} = 20V)$

$R_{DS(ON)}@10V \ 14mR(Typ.12.8mR)$

Qualified to AEC-Q101 Standards for High Reliability,

HF Product.

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies, Meet the stringent requirements of automotive applications.



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_{DS}	-30	V
Drain Current		$I_D(T_C=25^\circ\text{C})$	-34	A
Drain Current - Pulsed		I_{DM}	-80	A
Gate-Source Voltage		V_{GS}	20	V
Single Pulsed Avalanche Energy		E_{AS}	210	mJ
Avalanche Current		I_{AS}	-20	A
Power Dissipation		$P_D(T_C=25^\circ\text{C})$	29	W
Operating and Storage Temperature Range		T_J, T_{stg}	-55 to 150	
Junction-to-Ambient	$t \leq 10$	$R_{\theta JA}$	40	/W
Junction-to-Ambient	Steady-State		75	
Junction-to-Case	Steady-State	$R_{\theta JC}$	4.2	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$I_D = -250\mu A$ $V_{GS} = 0V$	-30	40.4958	0	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -30V$ $V_{GS} = 0V$	-30	40.4958	0	V

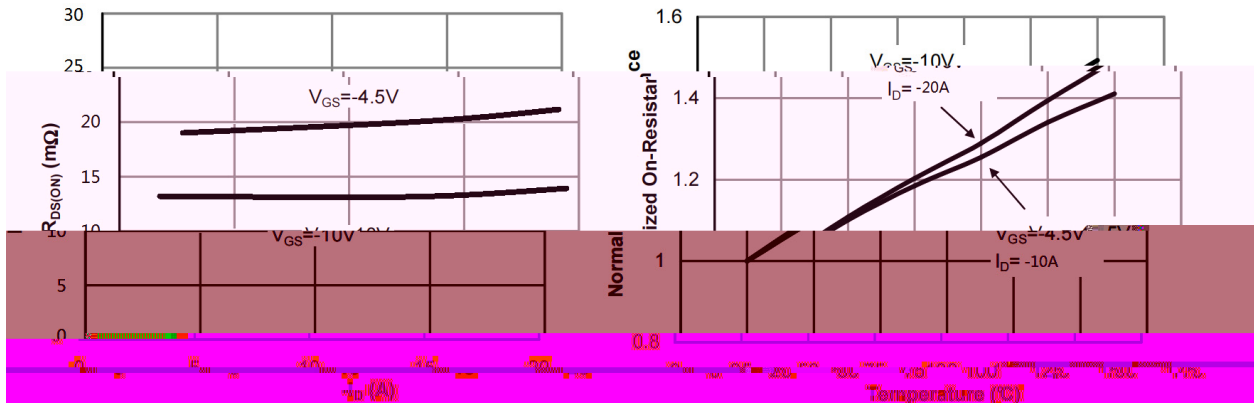
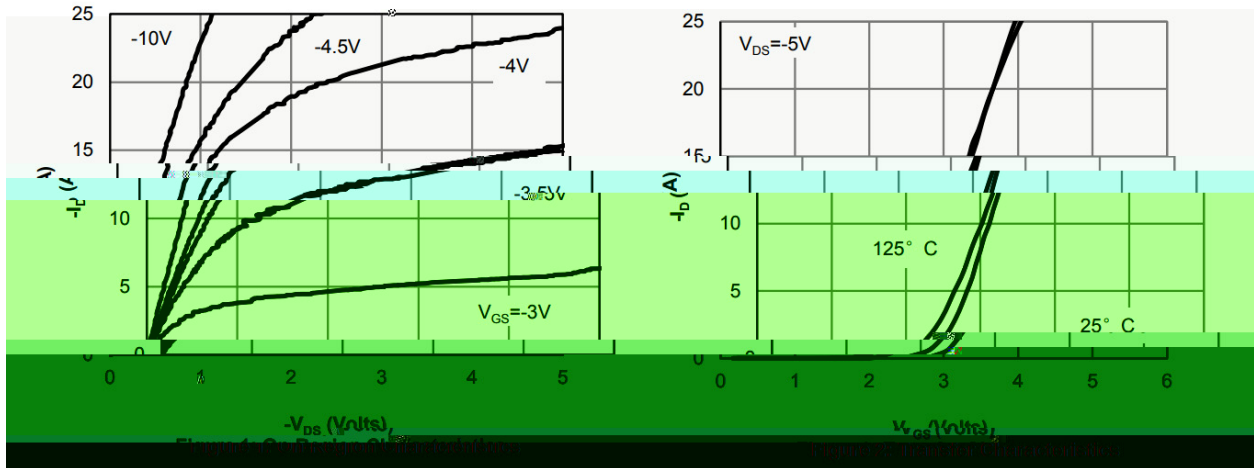


Figure 5: On-Resistance vs. Drain Current and Gate Voltage

Figure 6: On-Resistance vs. Junction Temperature

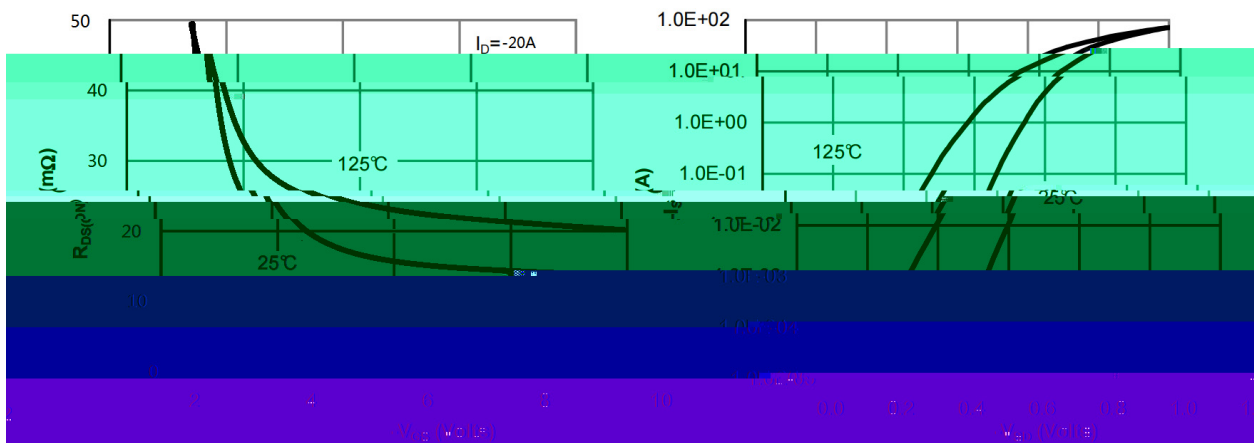
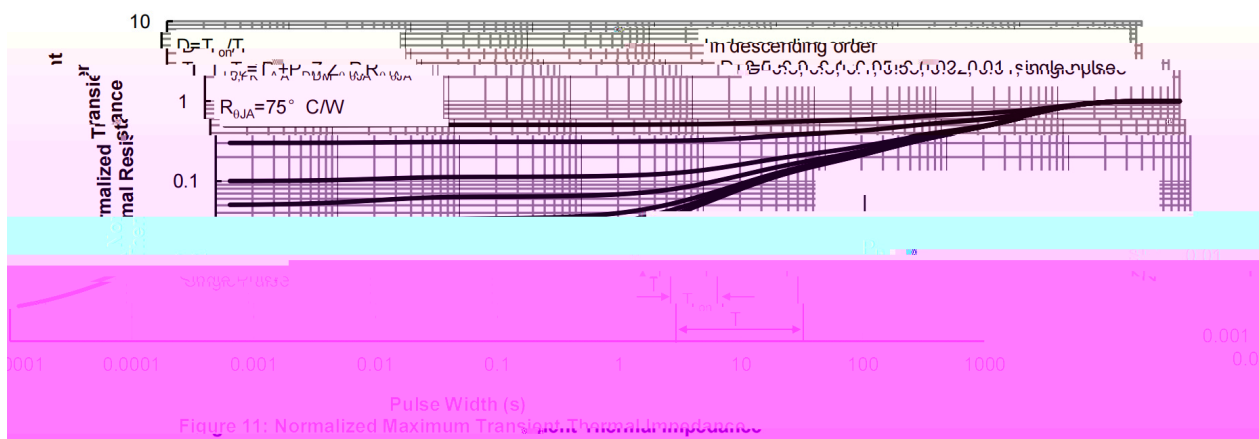
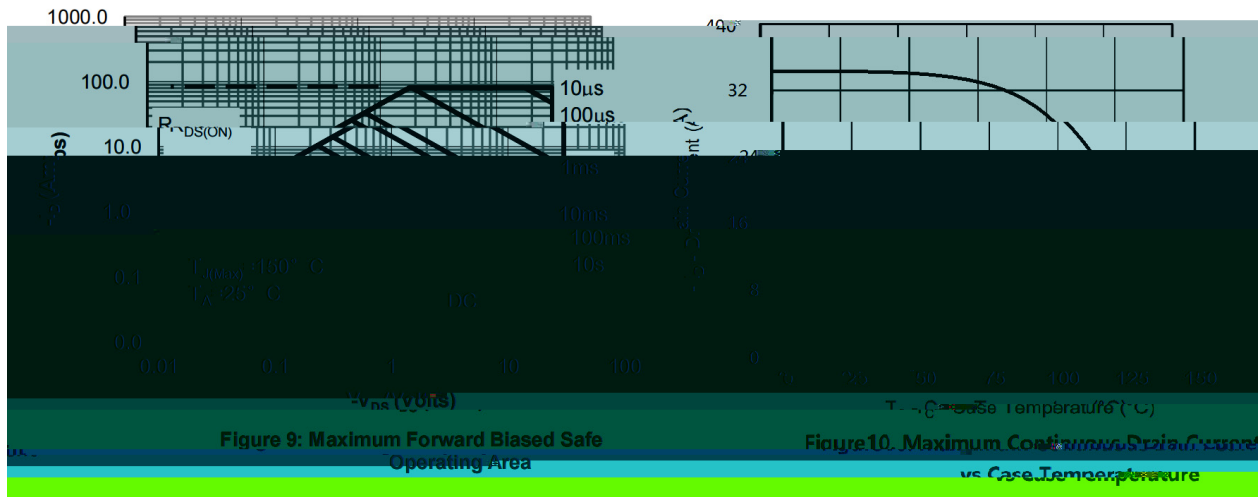
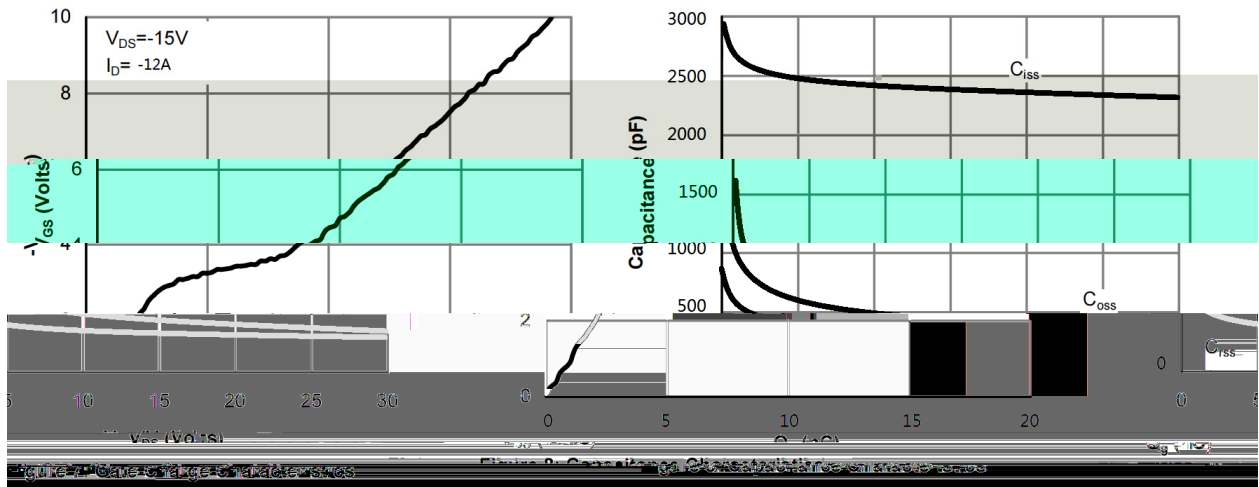


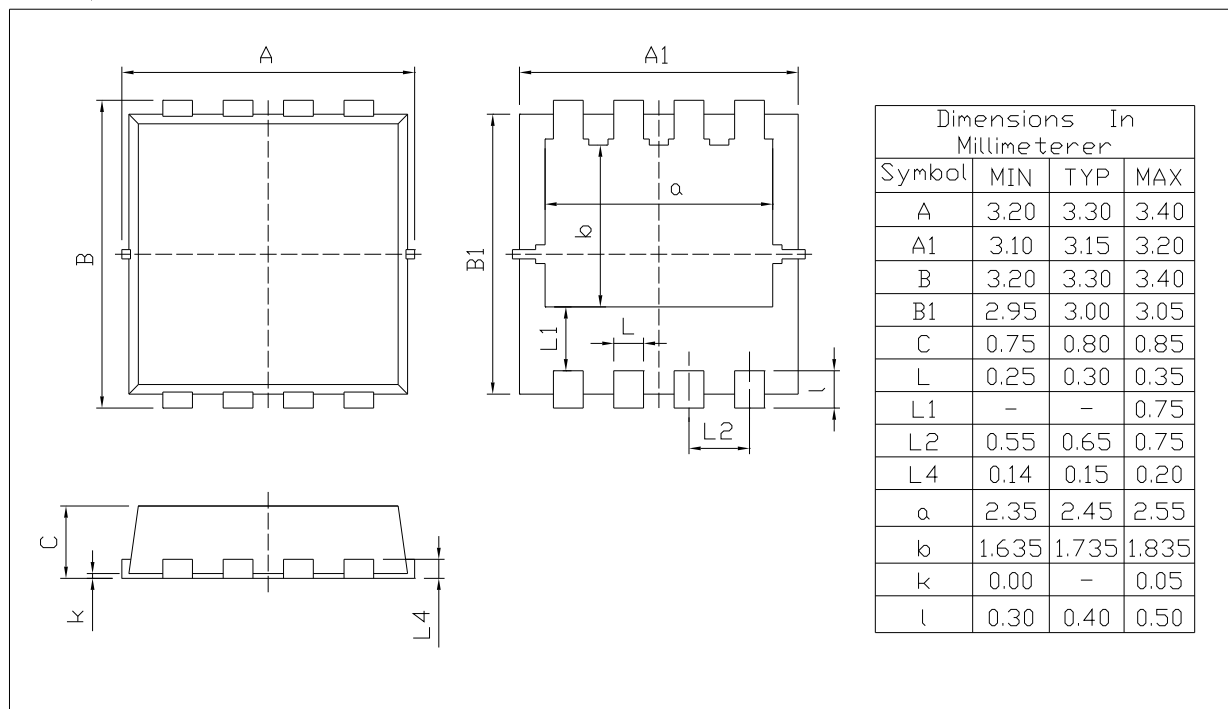
Figure 7: On-Resistance vs. Gate Source Voltage

Figure 8: On-Resistance vs. Drain Source Voltage

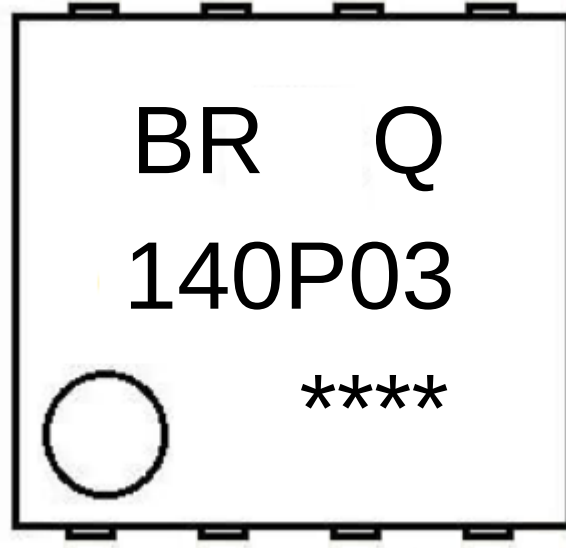


PDFN3X3A-8L

Unit:mm



Rev.00 202011



BR

Q

140P03

Note:

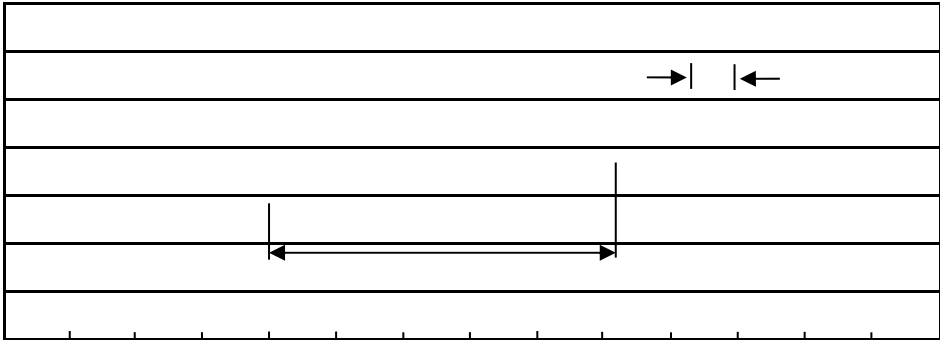
BR: Company Code

Q: Automobile halogen-free product Code

140P03: Product Type Code

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

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1

150 200

60 120sec;

1.Preheating:150~200 , Time:60~120sec.
- 2

255 5

5 0.5sec;

2.Peak Temp.:255 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
PDFN3×3A-8L	5,000	2	10,000	6	60,000	13 ×12	360×360×50	380×335×366