

/ Descriptions

PDFN 3 × 3A-8L N MOS

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

/ Features

 $V_{DS} (V) = 30V$ $I_D = 40 A (V_{GS} = \pm 20V)$ $R_{DS(ON)} @ 10V \leq 6mR (Typ. 4.7mR)$

AEC-Q101

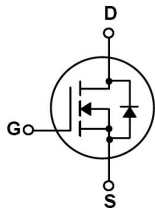
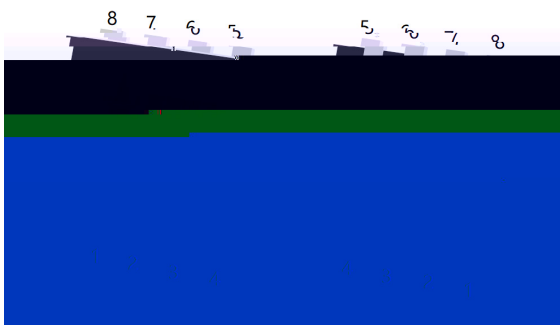
HF Product.

Qualified to AEC-Q101 Standards for High Reliability,

/ Applications

DC/DC

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



/ Marking

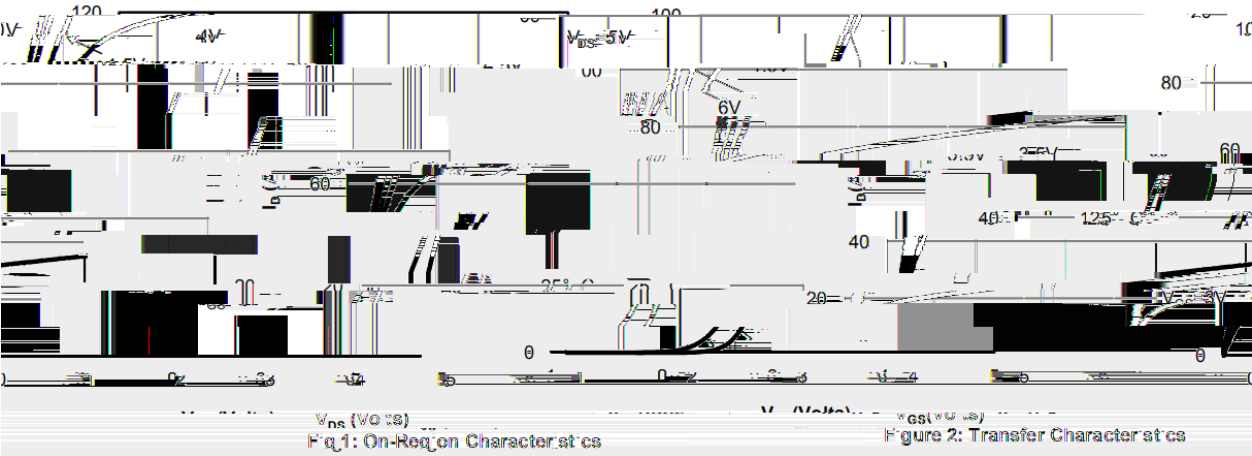
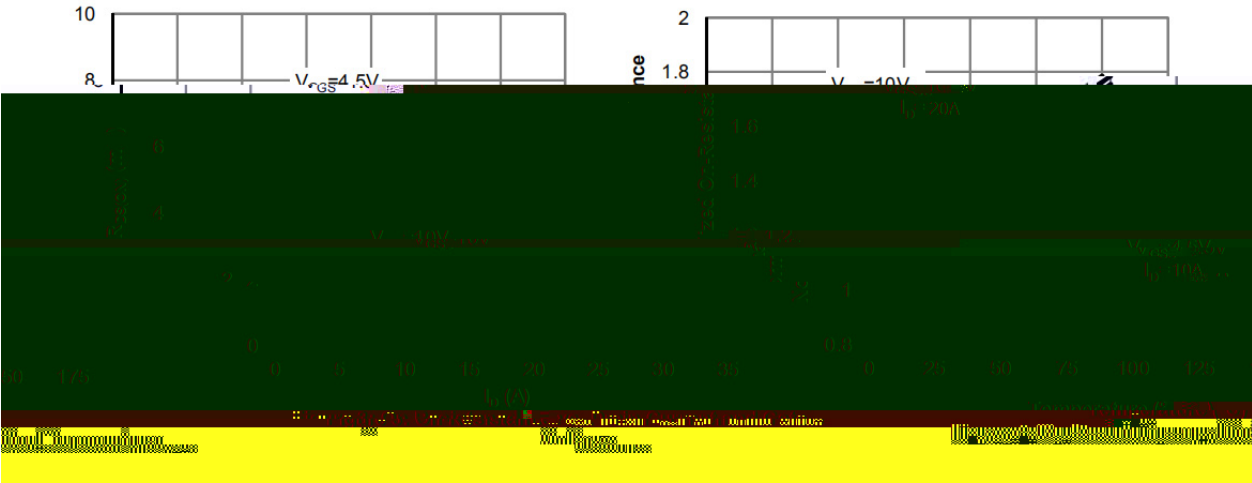
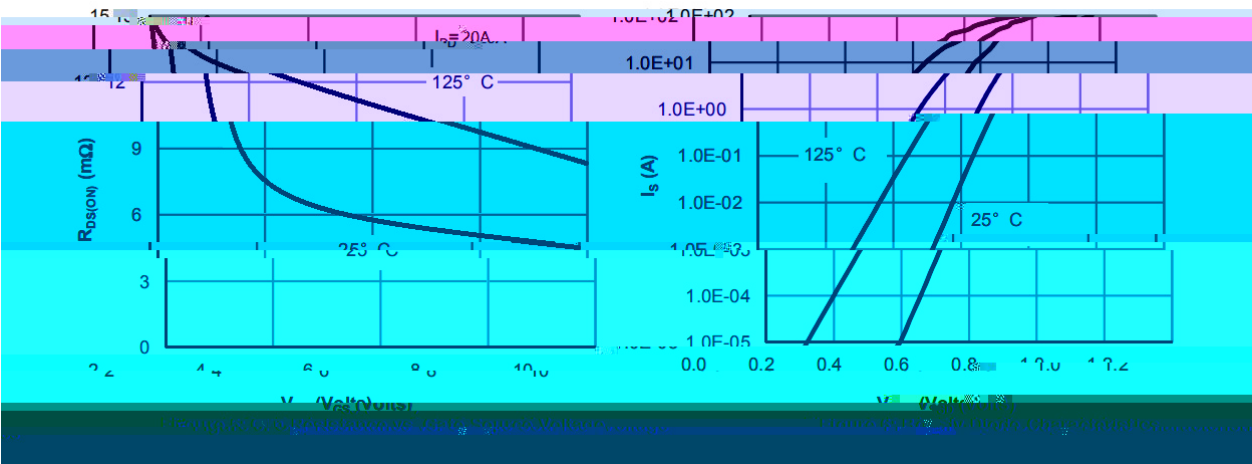
See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

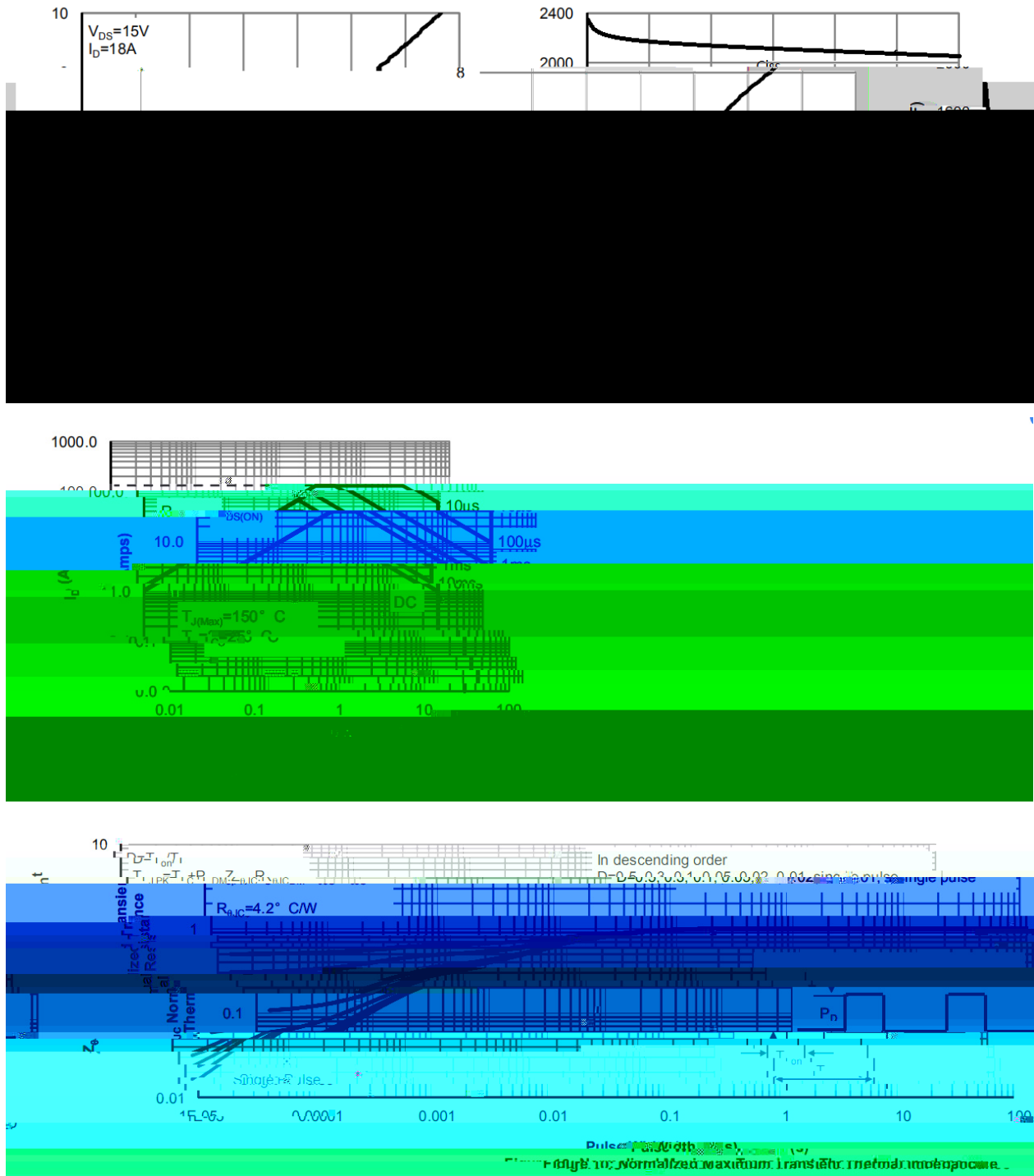
Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	30	V
Drain Current		$I_D(T_C=25)$	40	A
Drain Current - Pulsed		I_{DM}	130	A
Gate-Source Voltage		V_{GS}	± 20	V
Single Pulsed Avalanche Energy		E_{AS}	211	mJ
Avalanche Current		I_{AS}	23	A
Power Dissipation		$P_D(T_C=25)$	29	W
Operating and Storage 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
-----------	--------	-----------------	-----	-----	-----	------

/ Electrical Characteristic Curve



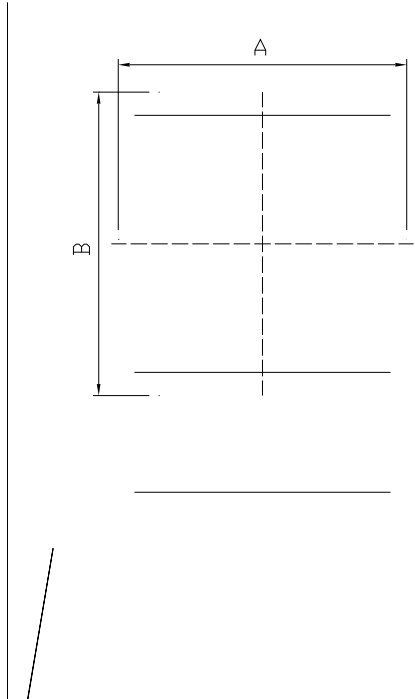
/ Electrical Characteristic Curve



/ Package Dimensions

PDFN3X3A-8L

Unit:mm



Dimensions In Millimeterer			
Symbol	MIN	TYP	MAX
A	3.20	3.30	3.40
A1	3.10	3.15	3.20
B	3.20	3.30	3.40
B1	2.95	3.00	3.05
C	0.75		
L1	-	-	0.75
L2	0.55	0.65	0.75
L4	0.14	0.15	0.20
a	2.35	2.45	2.55
b	1.635	1.735	1.835

Rev.00 202011

() / 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.

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units	Dimension	(unit mm ³)
--------------	-------	-----------	-------------------------