/ Descriptions

PDFN3×3A-8L P MOS

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

/ Features

V_{DS} (V) = -40V I_D =-20.5 A (V_{GS} = ± 20V)

$R_{DS(ON)}$@10V ≤ 35mΩ(Typ. 33mΩ)

$R_{DS(ON)}$@4.5V ≤ 60mΩ(Typ. 43mΩ)

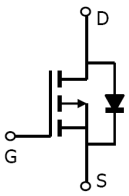
HF Product.

/ Applications

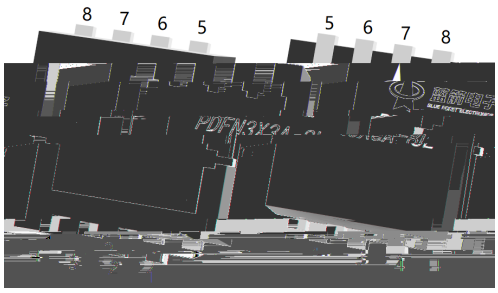
DC/DC

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

/ Equivalent Circuit



/ Pinning



出脚	定义
Pin1	S
Pin2	S

/ Marking

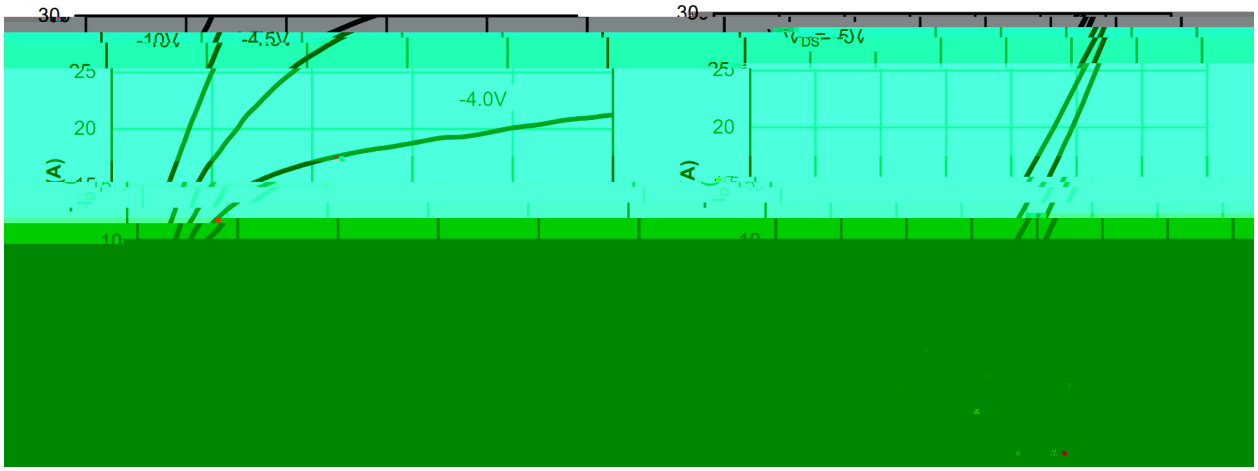
See Marking Instructions.

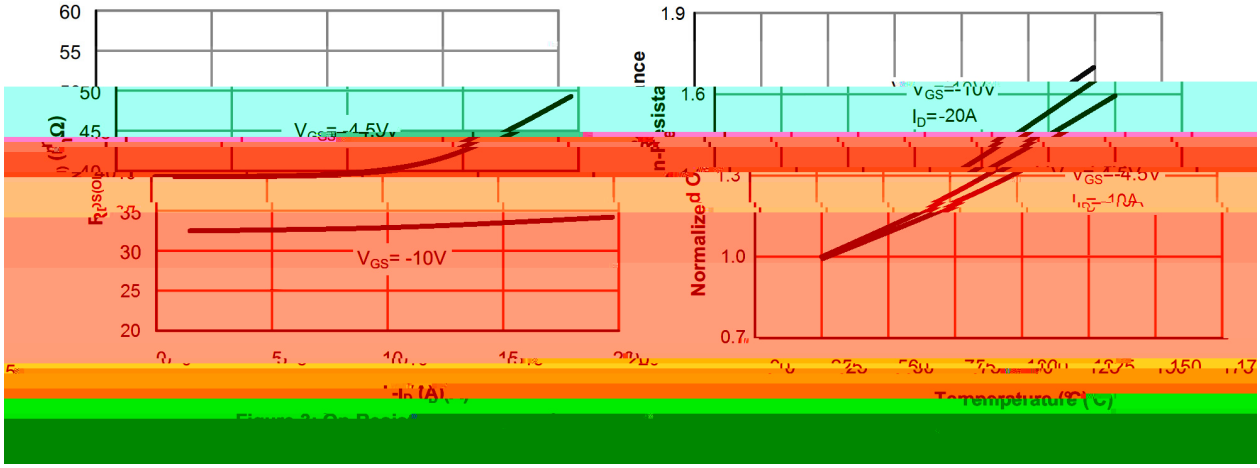
Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	-40	V
Drain Current		I_D(Tc=25)	-20.5	A
Drain Current - Pulsed		I_{DM}	-65	A
Gate-Source Voltage		V_{GS}	±20	V
Avalanche Current		I_{AS}	-17	A
Single Pulsed Avalanche Energy L=0.5mH		E_{AS}	144.5	mJ
Power Dissipation		P_D(Tc=25)	25	W
Storage Temperature Range		T_{stg}	-55 150	
Thermal Resistance-Junction to Ambient	t ≤ 10s	$R_{\theta JA}$	30	/W
	Steady-State		75	
Thermal Resistance-Junction to Case	Steady-State	$R_{\theta JC}$	5	

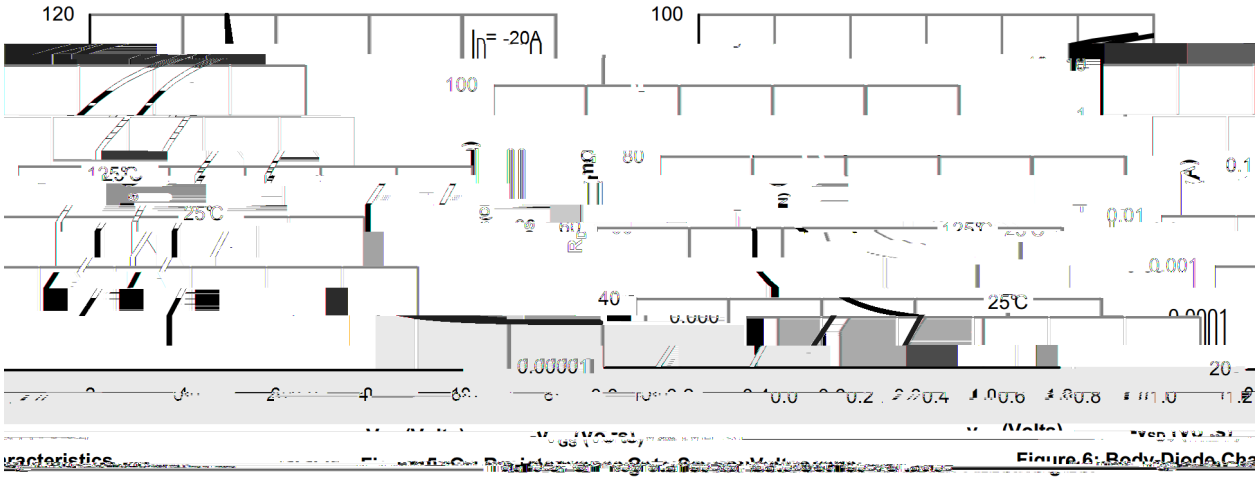
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=-250μA	-40	-46		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-40V V_{GS}=0V			1.0	μA
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±20V V_{DS}=0V			±0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=-250μA	-1.0	-1.4	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=-10V I_D=-20A		33	35	mΩ
		V_{GS}=-4.5V I_D=-10A		40	60	
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V I_S=-1A		=0V		

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit

/ Electrical Characteristic Curve







/ Marking Instructions

BR

350P04

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Note:

BR:	Company Code
350P04:	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.

/ Resistance to Soldering Heat Test Conditions

605±5