/ Descriptions

PDFN5×6-Clip P

P-Channel MOSFET in a PDFN5×6-Clip Plastic Package.

/ Features

V_{DS}(V)=-40V I_D=-150A

$R_{DS(ON)}$@-10V<3mΩ(TYP. 2.5mΩ)

$R_{DS(ON)}$@-4.5V<4.5mΩ(TYP. 3.6mΩ)

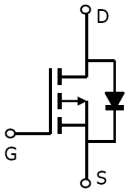
HF Product.

/ Applications

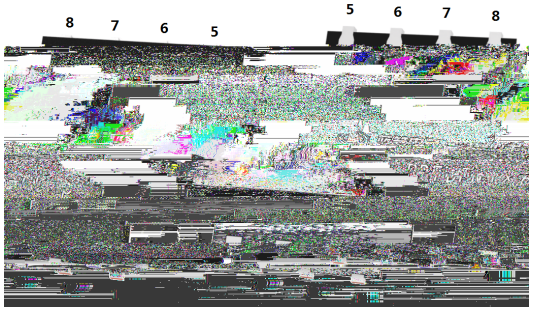
DC - DC

Motor drivers, DC - DC Converter.

/ Equivalent Circuit



/ Pinning



PIN1 2 3 S PIN4 G PIN5 6 7 8 D

/ Marking

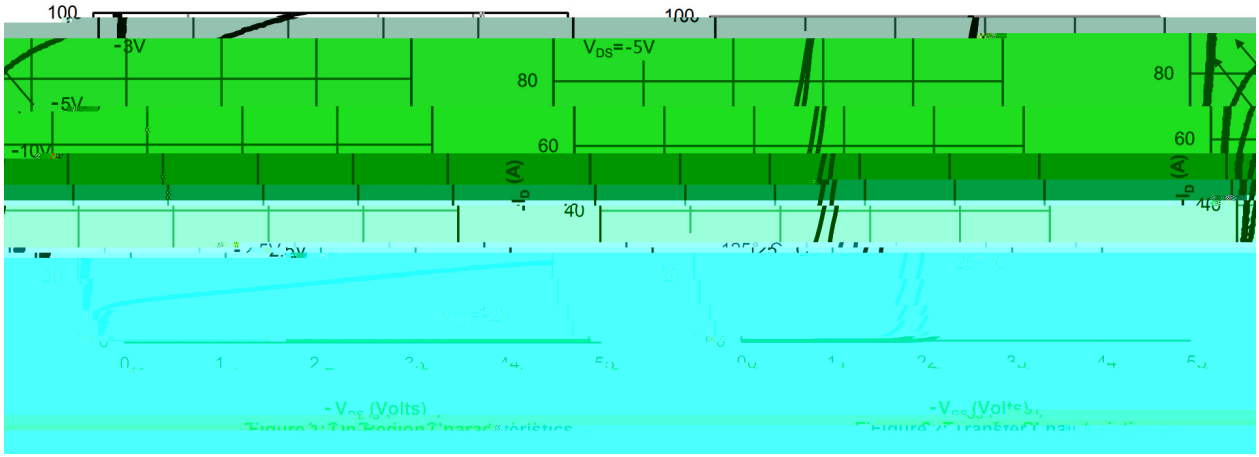
See Marking Instructions.

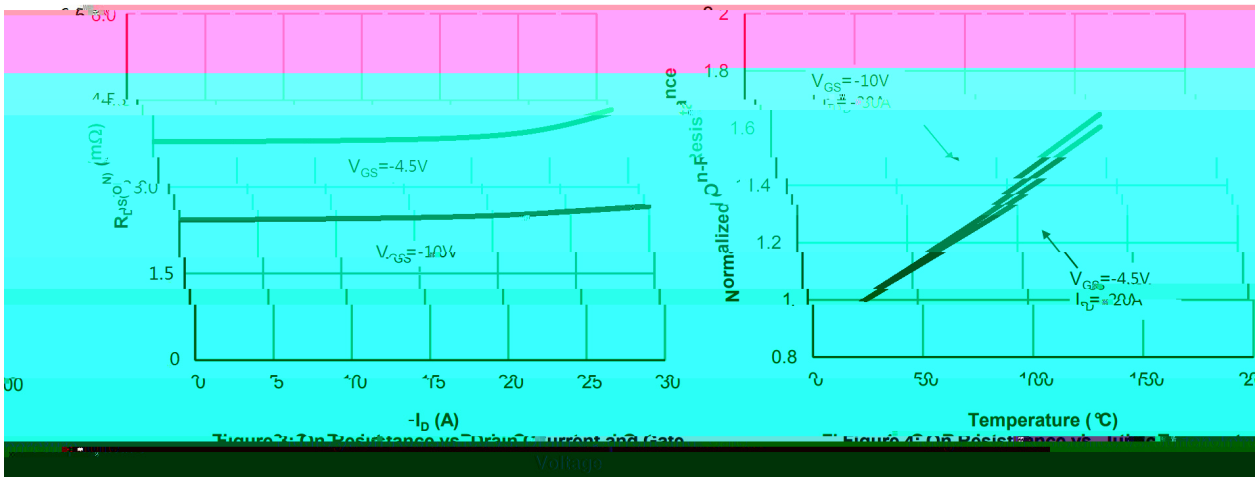
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-40	V
Drain Current – Continuous	I_D(T_c=25)	-150	A
	I_D(T_c=100)	-94	A

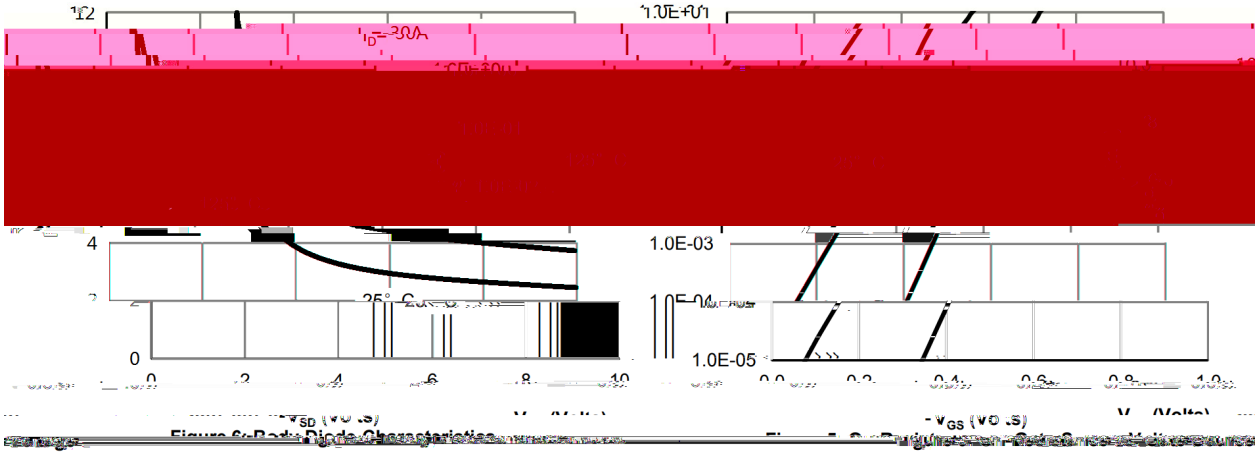
Drain Cu

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	Q_g	V_{GS}=-10V, V_{DS}=-20V, I_D=-20A		249		nC
Gate Source Charge	Q_{gs}			53		
Gate Drain Charge	Q_{gd}			26		
Turn-On Delay Time	$t_{d(on)}$	V_{GEN}=-10V V_{DS}=-20V R_L=0.66Ω R_G=3.9Ω I_{DS}=-20A		15		ns
Turn-On Rise Time	t_r			75		
Turn-Off Delay Time	$t_{d(off)}$			324		
Turn-Off Fall Time	t_f			98		

/ Electrical Characteristic Curve







/ Electrical Characteristic Curve

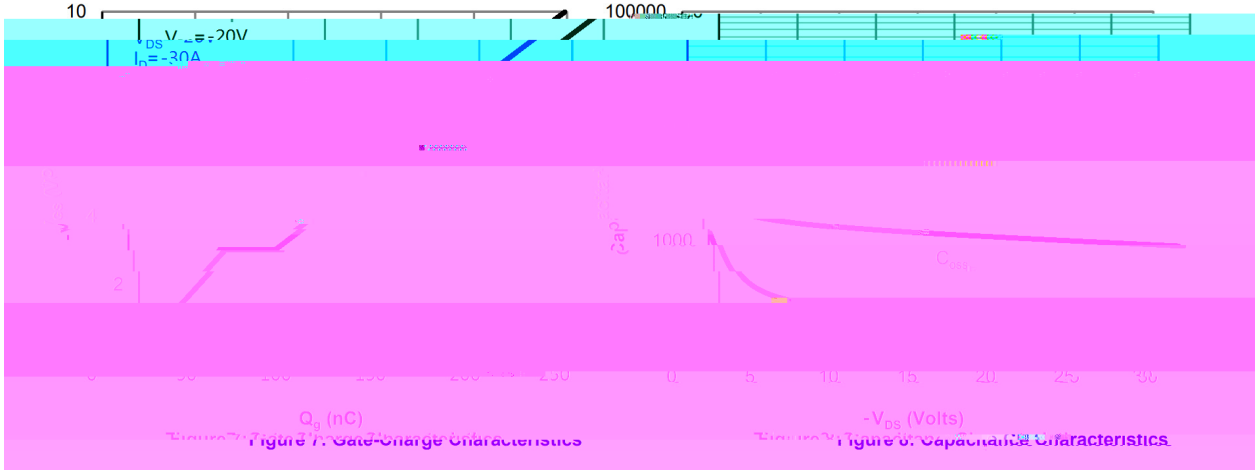


Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics

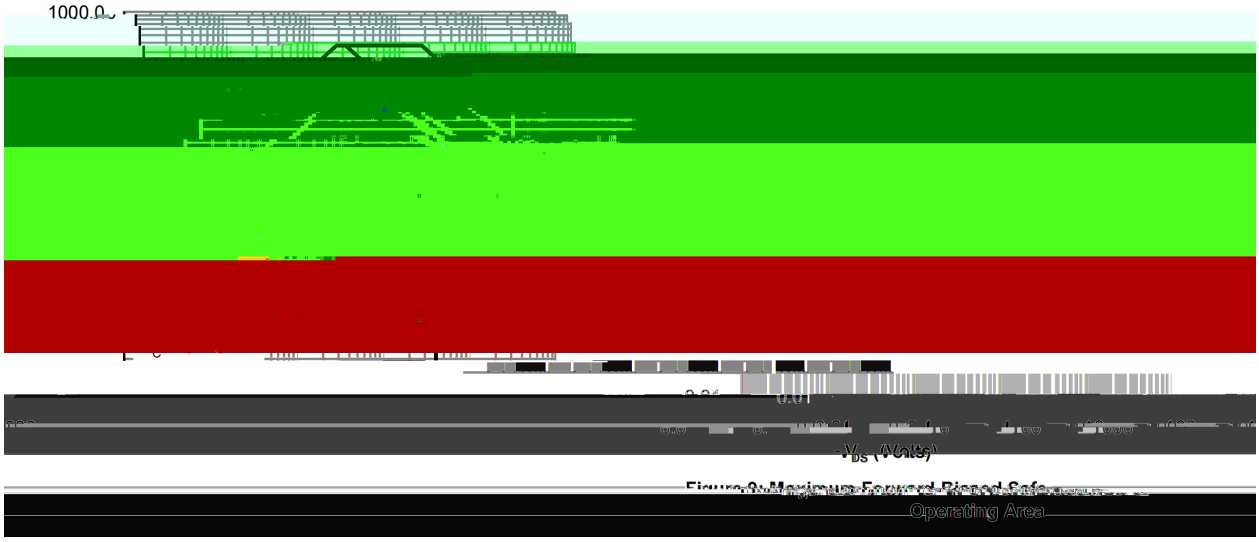
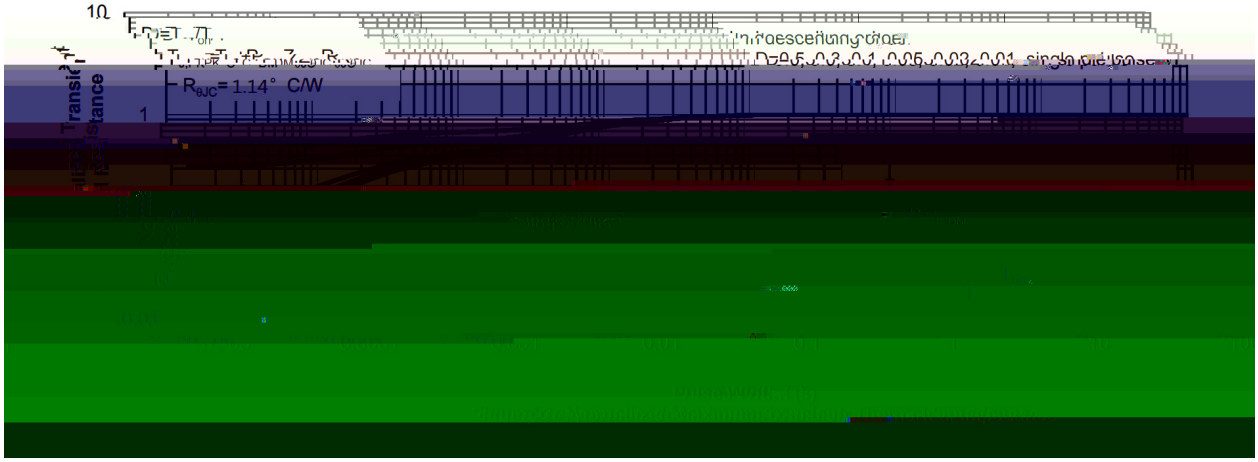
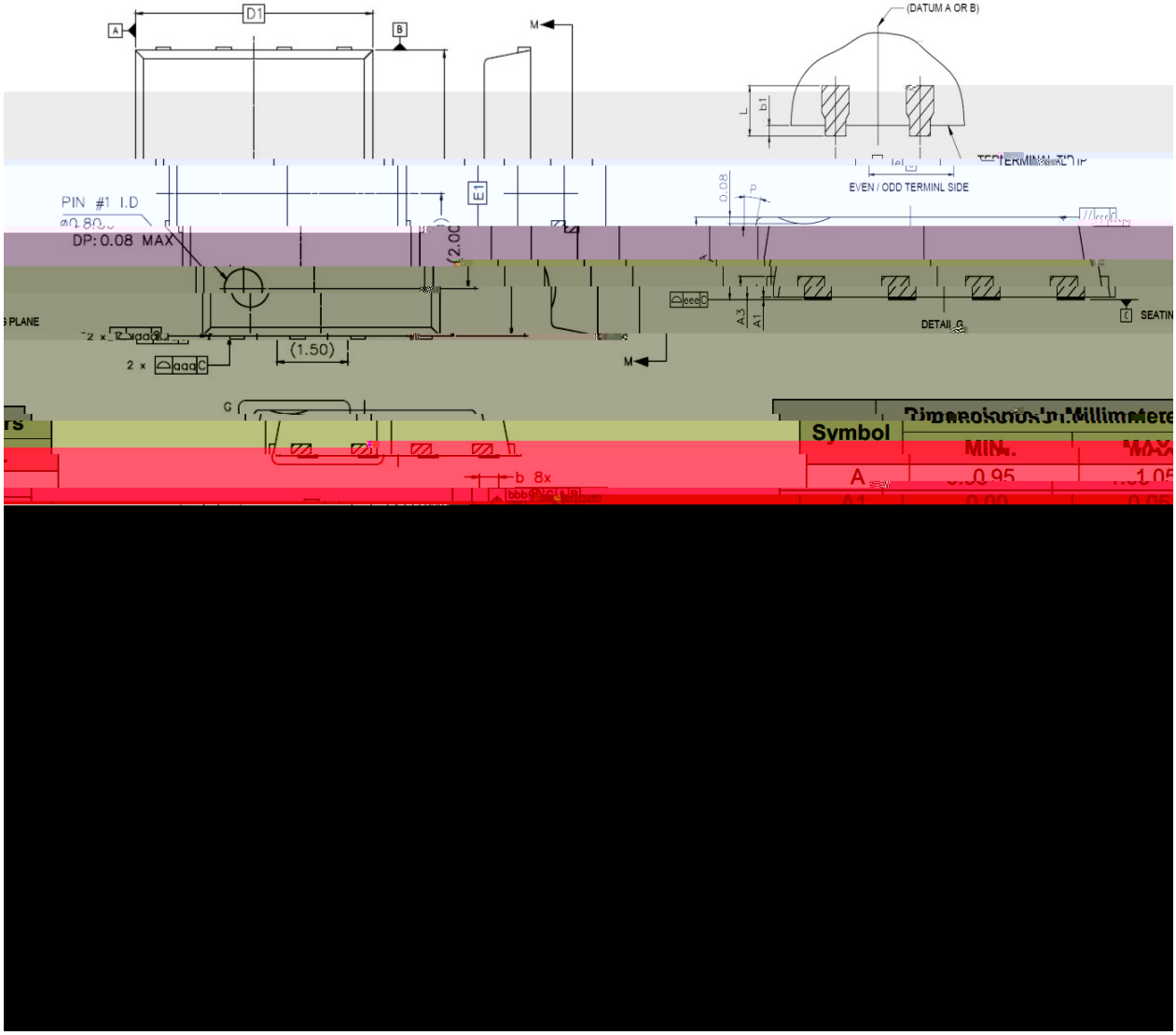


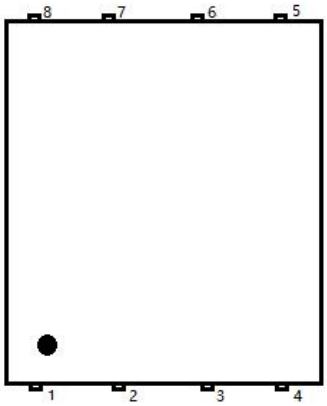
Figure 9: Maximum Forward Biased Safe



/ Package Dimensions



/ Marking Instructions



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( ) / 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

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

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension		(unit mm³)
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
PDFN5×6-Clip	5,000	2	10,000	6	60,000	13''×12	360×360×50	380×335×366