

/ Descriptions

PDFN5 6A P

Dual P-CHANNEL MOSFET in a PDFN5×6A Plastic Package .

/ Features

Dual P-CHANNEL

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

$I_D=-33A$

$R_{DS(ON)}<8m\ (V_{GS}=-10V)$

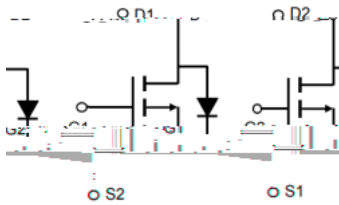
$R_{DS(ON)}<15m\ (V_{GS}=-4.5V)$

HF Product.

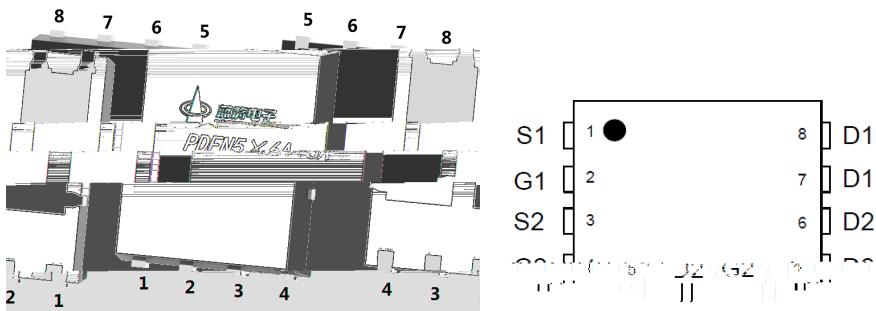
/ Applications

Power Management in Notebook Computer, Portable Equipment and Battery Powered Systems.

/ Equivalent Circuit



/ Pinning



/ Marking

See Marking Instructions.

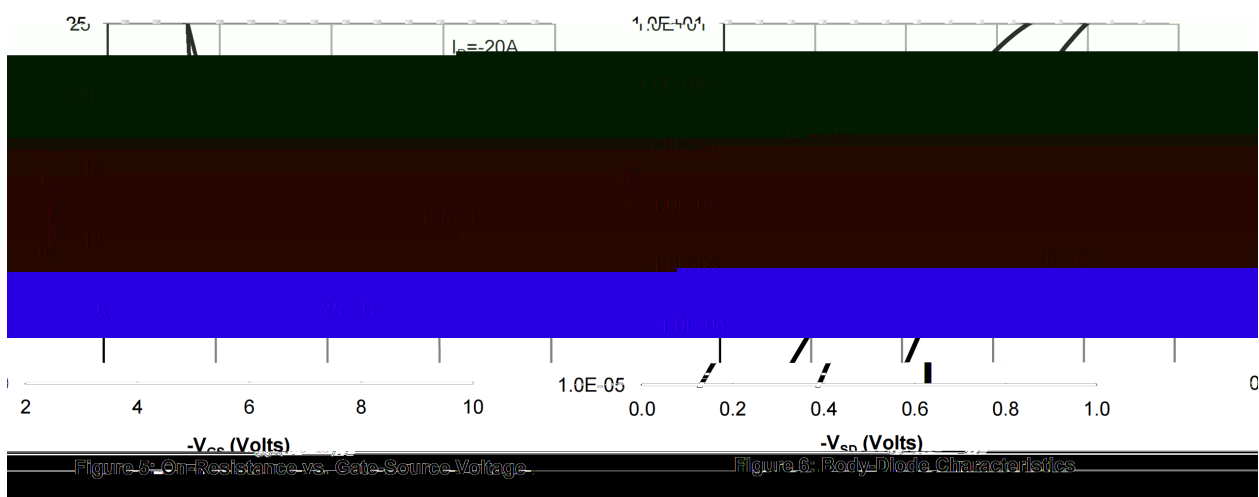
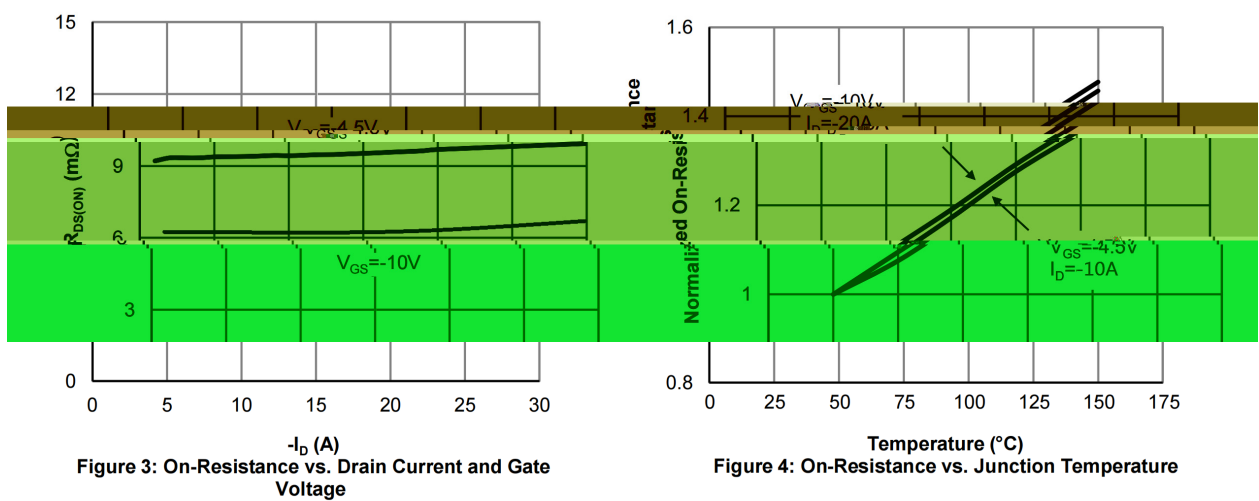
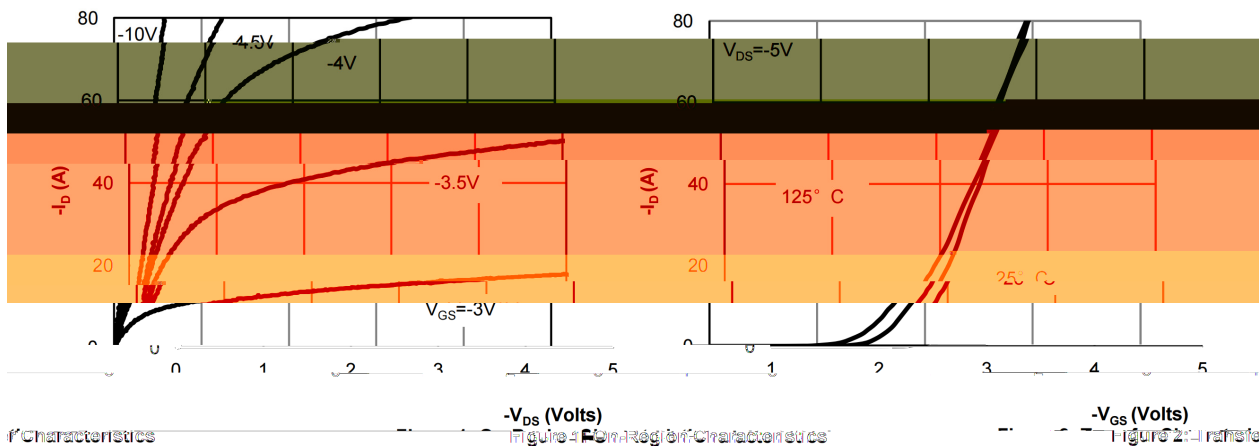
Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	-30	V
Drain Current - Continuous		$I_D(T_c=25^\circ\text{C})$	-33	A
Drain Current – Pulsed		I_{DM}	-60.5	A
Gate-Source Voltage		V_{GS}	20	V
Power Dissipation		$P_D(T_c=25^\circ\text{C})$	15	W
Single Pulse Avalanche Energy(L=0.5mH)		E_{AS}	360	mJ
Avalanche Current(L=0.5mH)		I_{AS}	-30	A
Junction and Storage Temperature Range		T_j, T_{stg}	-55 to 150	
Thermal resistance, junction - ambient	t 10s	R_{JA}	50	/ W
	Steady-State		88	
Thermal resistance, junction - case	Steady-State	R_{JC}	8.3	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
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/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=-10V$ $V_{DS}=-15V$ $R_L=0.75$ $R_{GEN}=3$		12.5		ns
Turn-On Rise Time	t_r			19		
Turn-Off Delay Time	$t_{d(off)}$			125		
Turn-Off Fall Time	t_f			67		

Electrical Characteristic Curve





Electrical Characteristic Curve

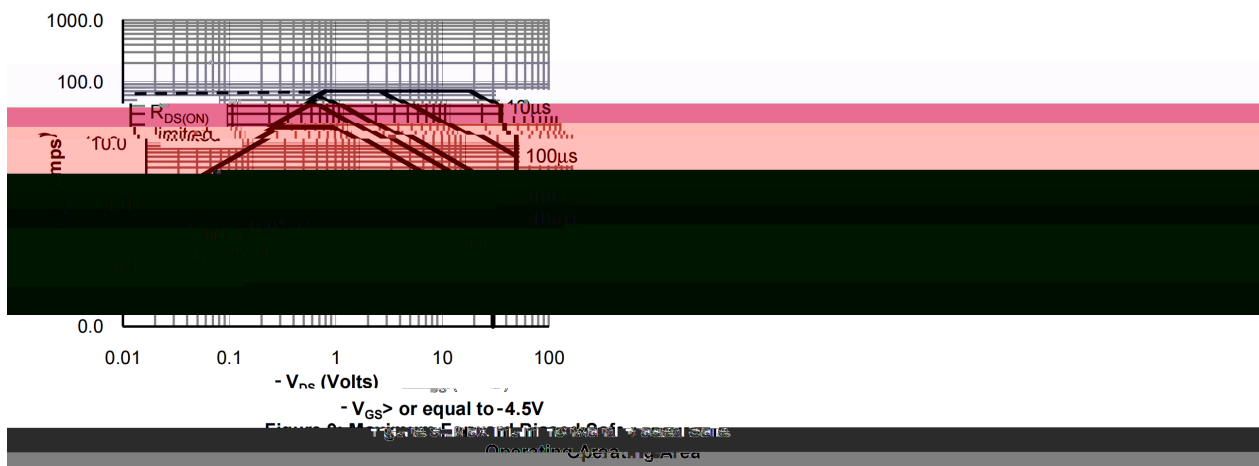
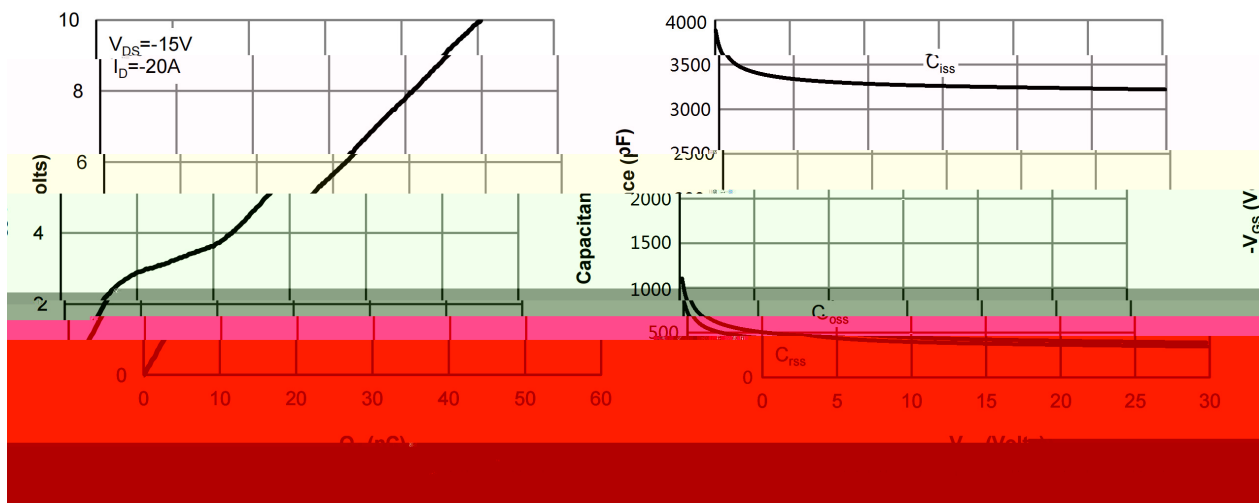
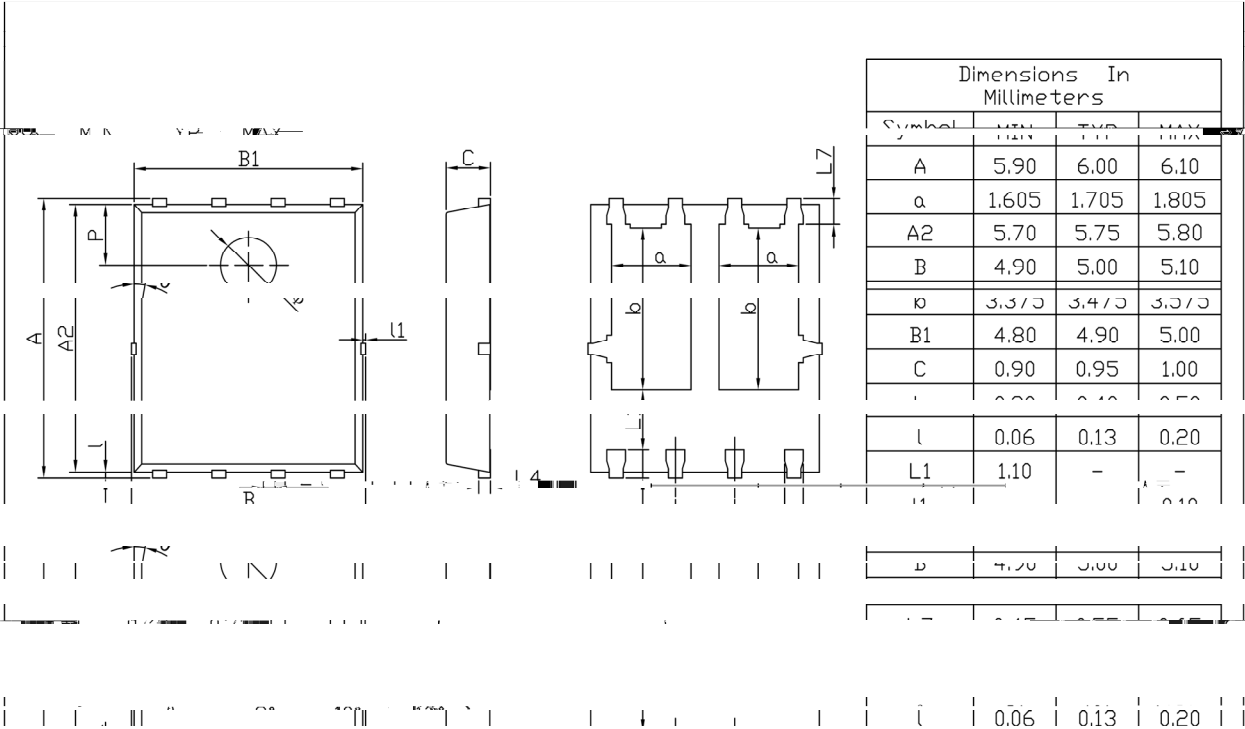


Figure 10: Normalized Maximum Transient Thermal Impedance

I Package Dimensions

PDFN5 X6A

Unit:mm



/ Marking Instructions

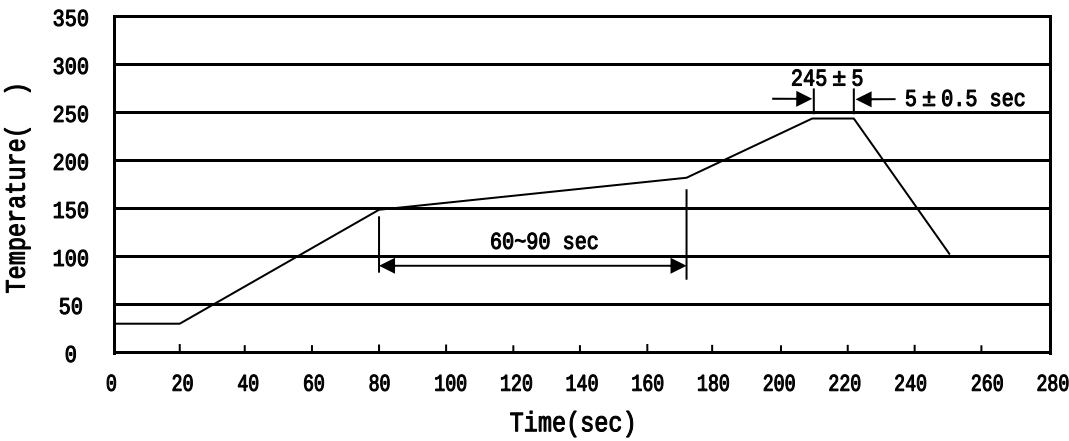


070P03

Note

BR	Company Code
070P03	Product Type
****:	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 °C , Time:60~90sec. |
| 2 | 245 | 5 | 5 | 0.5sec; | 2.Peak Temp.:245 ± 5 °C , Duration:5 ± 0.5sec. |
| 3 | | 2 | 10 | °C/sec. | 3. Cooling Speed: 2~10 °C/sec. |

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ 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
PDFN5×6A	5000	2	10000	6	60000	13"×12	360×360×50	380×335×366

/ Notices