

/ Descriptions

PDFN5×6A N

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

/ Features

 $V_{DS}(V)=30V$ $I_D=52A$ $R_{DS(ON)}@10V<5.5m\Omega$ (Typ. 5.2 m Ω) $R_{DS(ON)}@4.5V<9.5m\Omega$ (Typ. 7.6 m Ω)

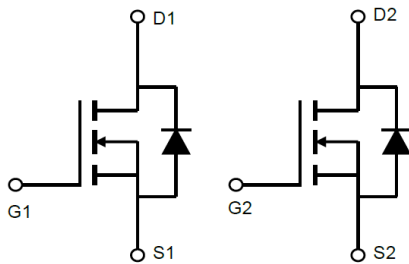
HF Product.

/ Applications

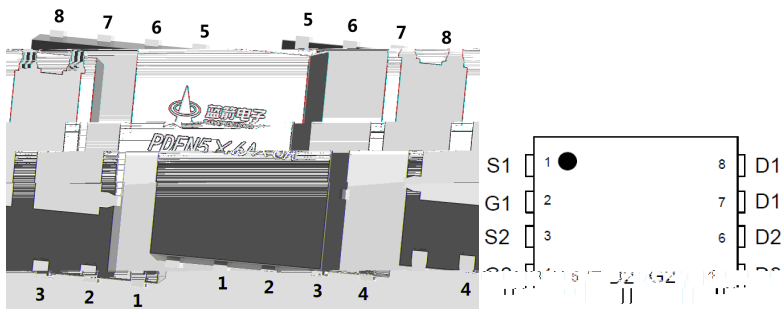
PWM LED

PWM Application, Load Switch, Power Management, Dimming LED.

/ Equivalent Circuit



/ Pinning



/ Marking

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V _{DSS}	30	V

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{DS}=15\text{ V}$ $V_{GS}=10\text{V}$ $R_L=0.75\Omega$ $R_{GEN}=3\Omega$		11		ns
Turn-On Rise Time	t_r			14		ns
Turn-Off Delay Time	$t_{d(off)}$			38		ns
Turn-Off Fall Time	t_f			10		ns

/ Electrical Characteristic Curve

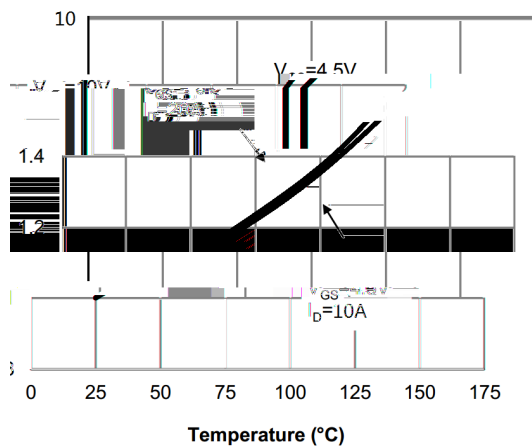
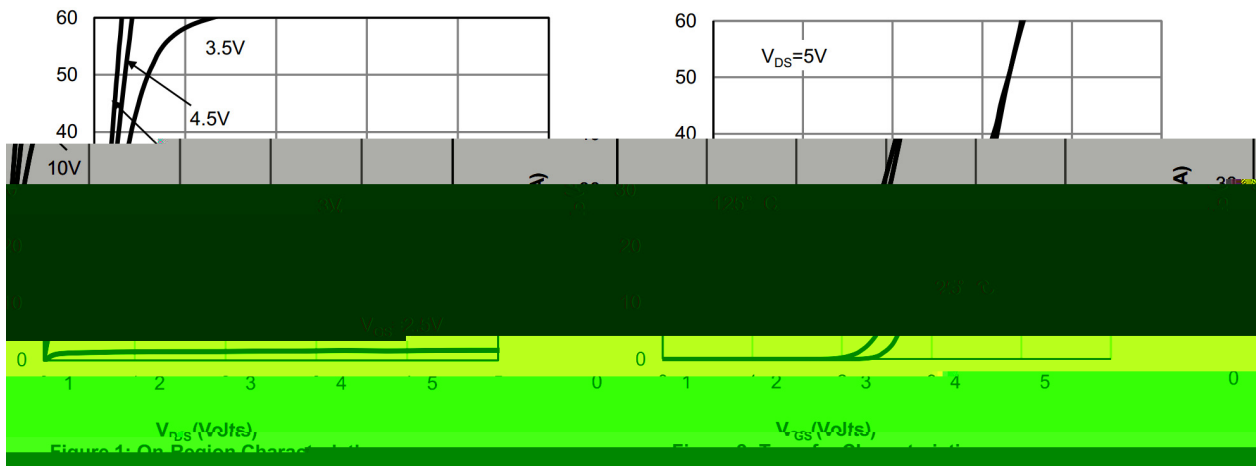


Figure 4: On-Resistance vs. Junction Temperature

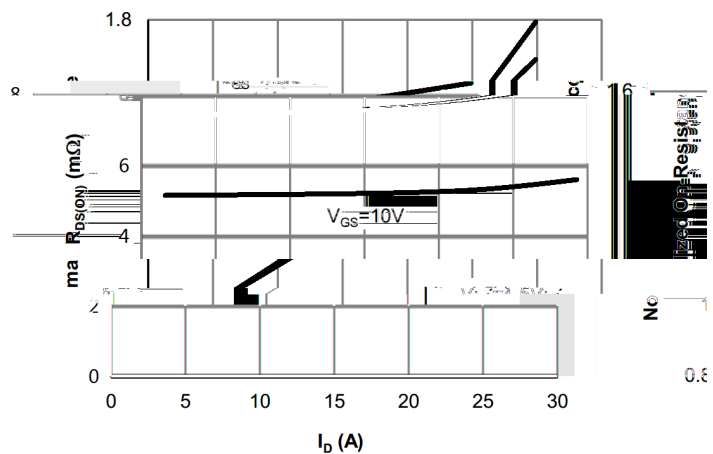
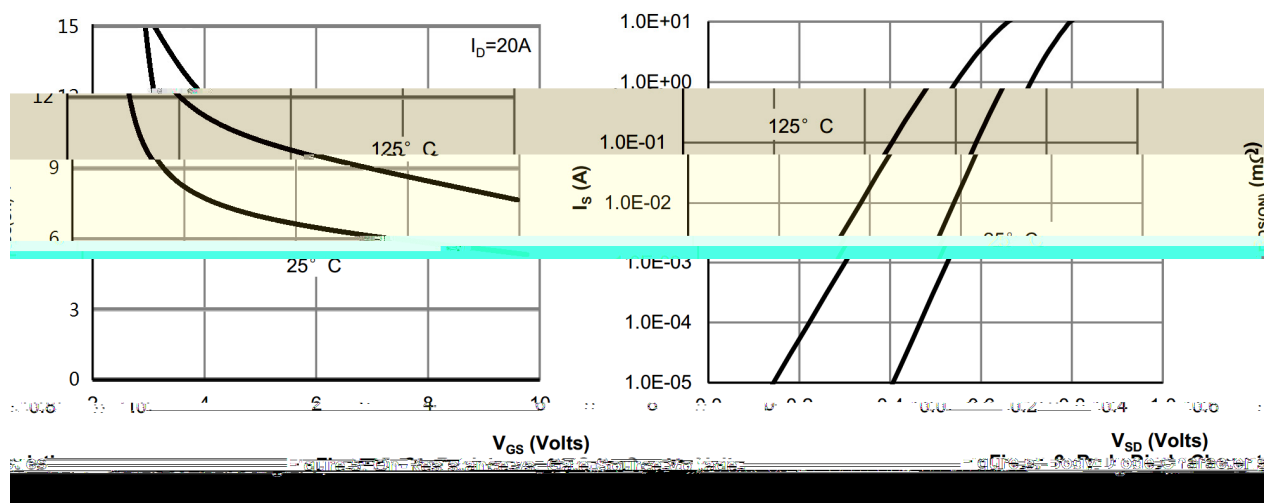
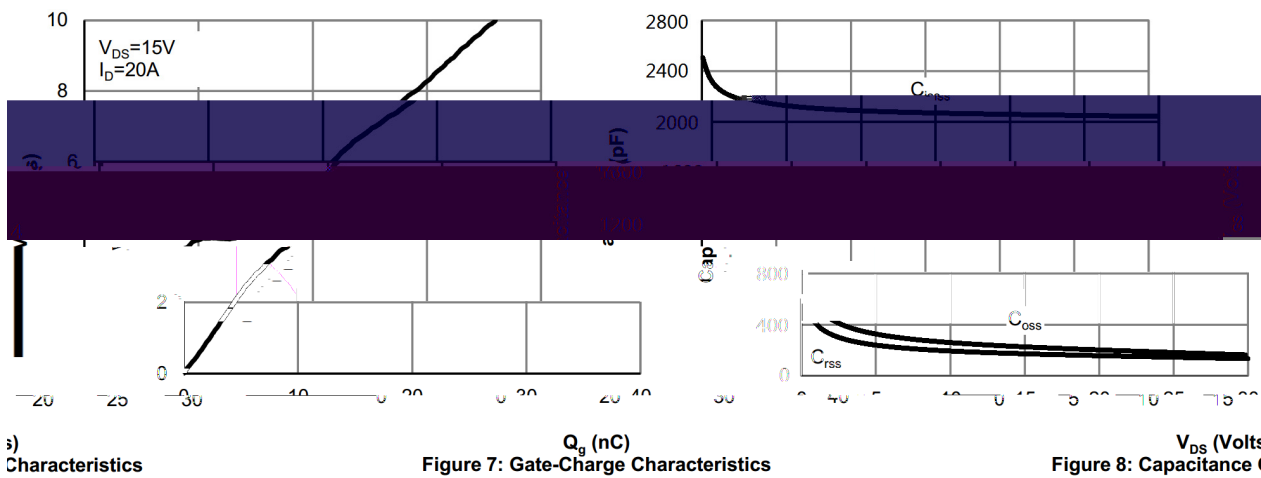


Figure 3: On-Resistance vs. Drain Current and Gate Voltage



/ Electrical Characteristic Curve



Characteristics

Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics

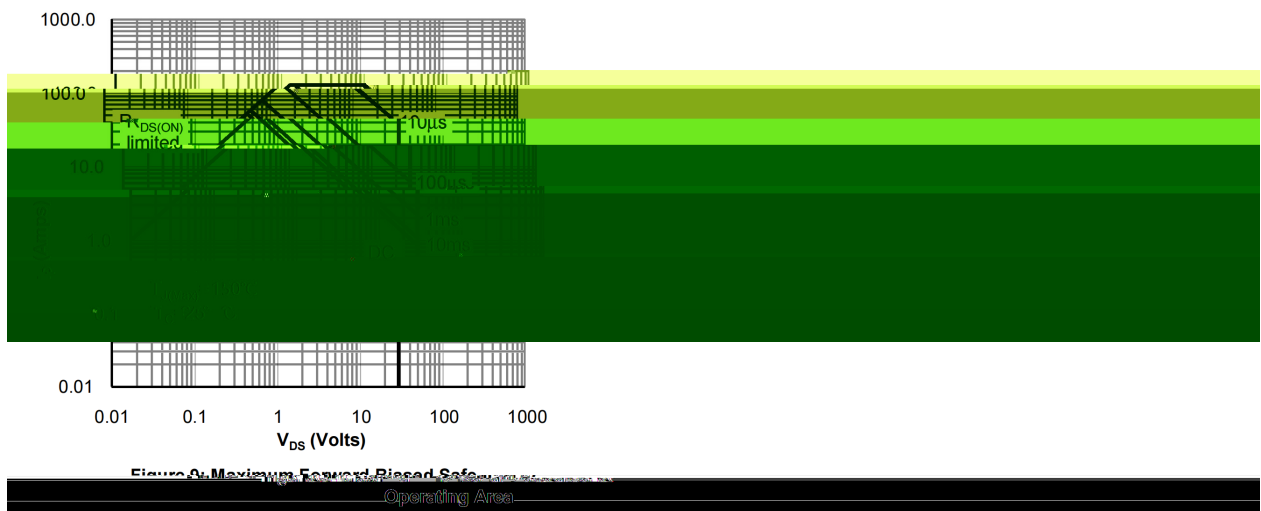


Figure 9: Maximum Forward Biased Safe Operating Area

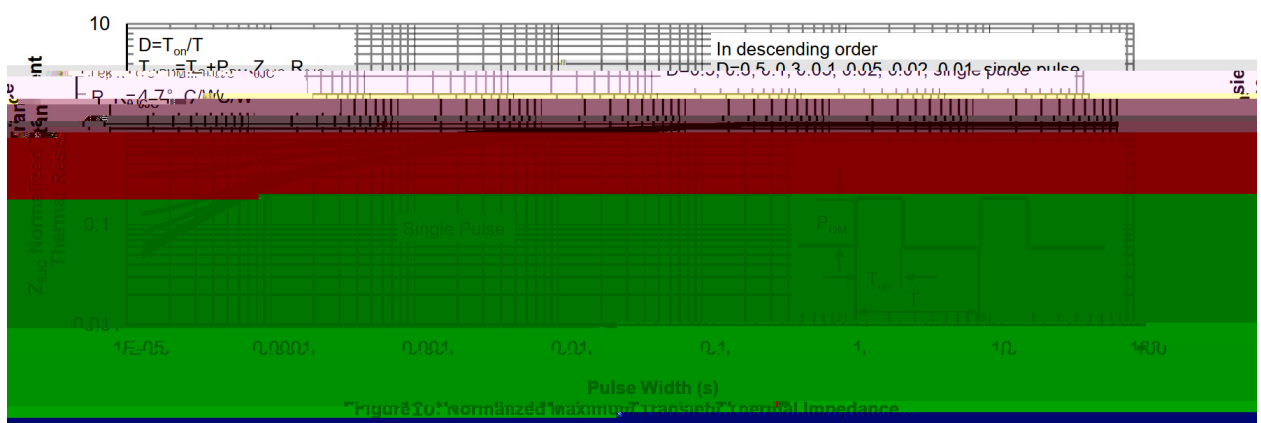
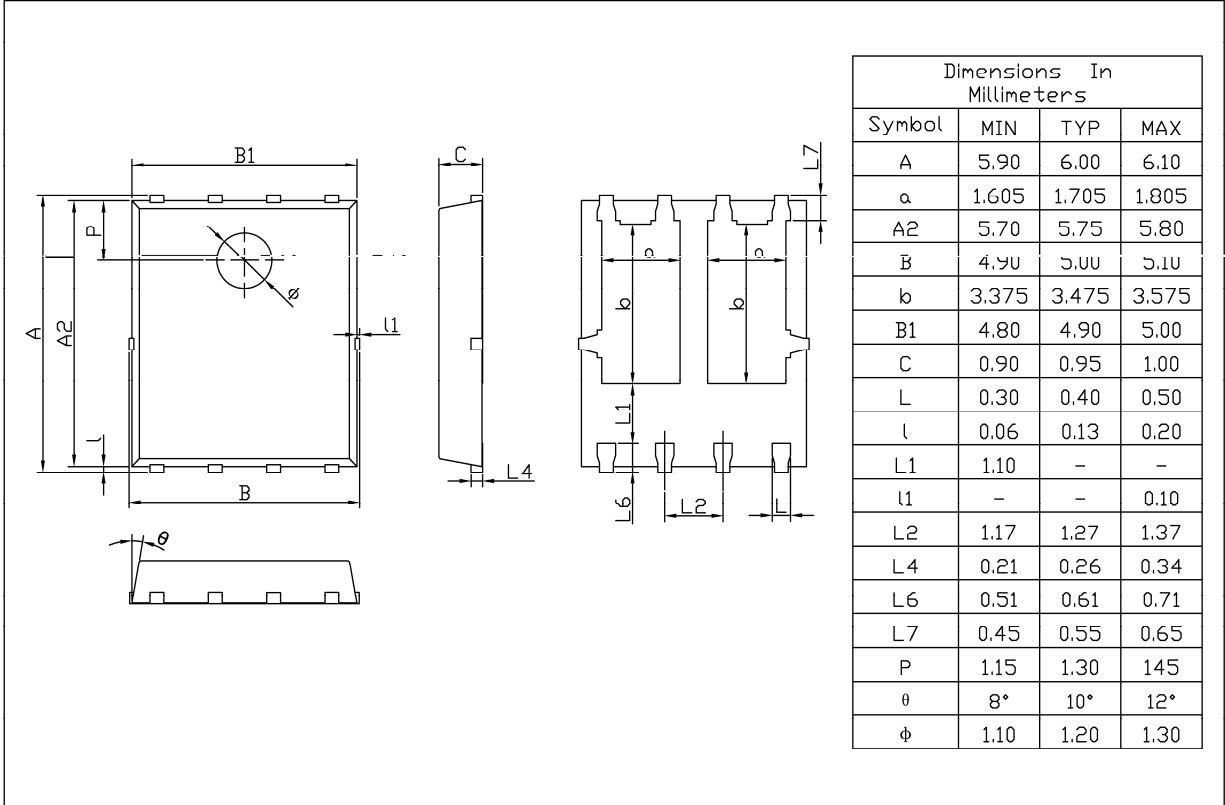


Figure 10: Normalized Maximum Transient Thermal Impedance

/ Package Dimensions

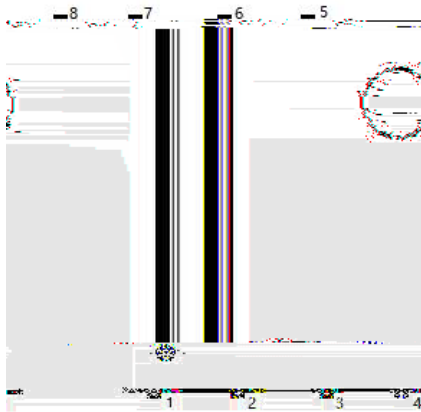
PDFN5 X6A

Unit:mm



Rev.01 202209

/ Marking Instructions



BR

055N03

Note

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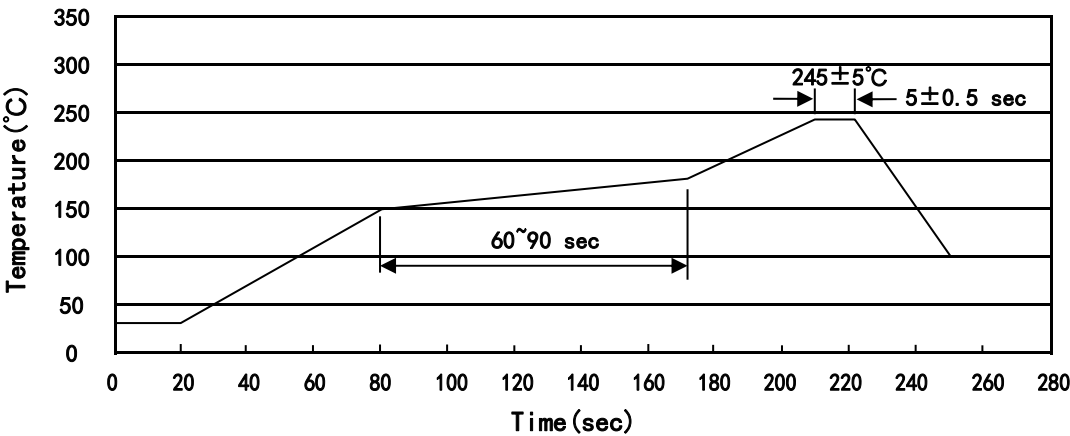
****:

Company Code

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

260±5 10±1 sec. Temp.:260±5 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	5,000	2	10,000	6	60,000	13"×12	360×360×50	380×335×366

/ Notices