

/ Descriptions

PDFN5 6 N

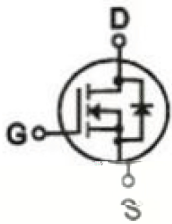
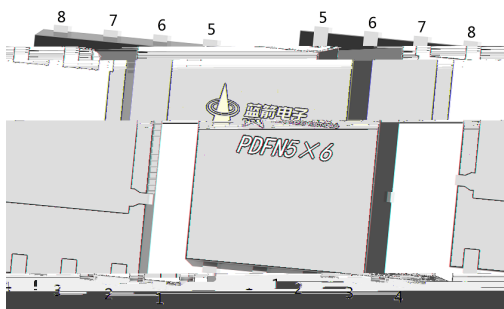
N-Channel MOSFET in a PDFN5×6 Plastic Package.

/ Features $V_{DS}(V)=40\text{ V}$ $I_D=98\text{ A}$ $R_{DS(ON)}@10V\leq 3.5\text{ m}\Omega$ (Typ.3.0mR) $R_{DS(ON)}@4.5V\leq 5.0\text{ m}\Omega$ (Typ.4.0mR)

HF Product.

/ Applications

Battery Management,High Frequency Point-of-Load Synchronous Buck Converter for MB/NB/UMPC/VGA,Networking DC-DC Power System,Load Switch.

/ Equivalent Circuit**/ Pinning**

PIN1 2 3 S PIN4 G PIN5 6 7 8 D

/ Marking

See Marking Instructions.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	t _{d(on)}	V _{GS} =10V V _{DS} =20V R _L =1Ω R _{GEN} =3Ω		11		ns
Turn-On Rise Time	t _r			11		
Turn-Off Delay Time	t _{d(off)}			40		
Turn-Off Fall Time	t _f			10		

/ Electrical Characteristic Curve

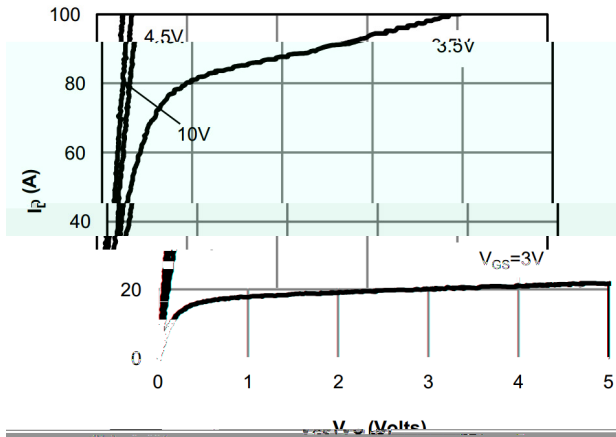


Figure 1: On-Region Characteristics

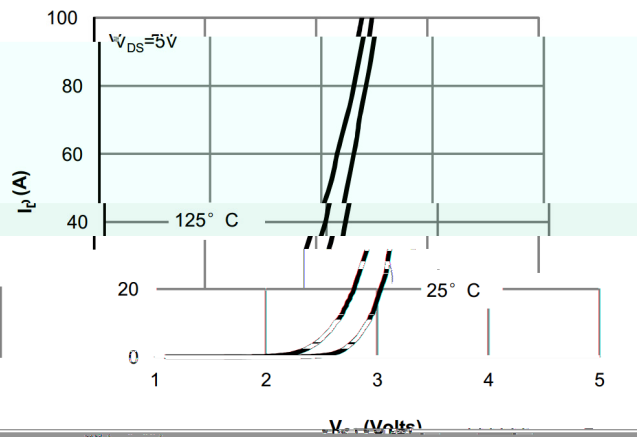


Figure 2: Transfer Characteristics

Figure

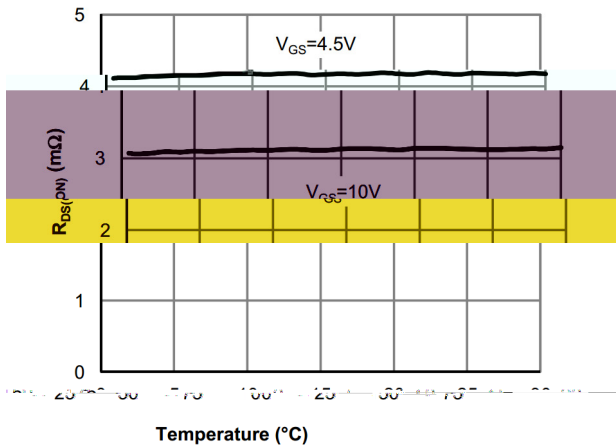


Figure 4: On-Resistance vs. Junction Temperature

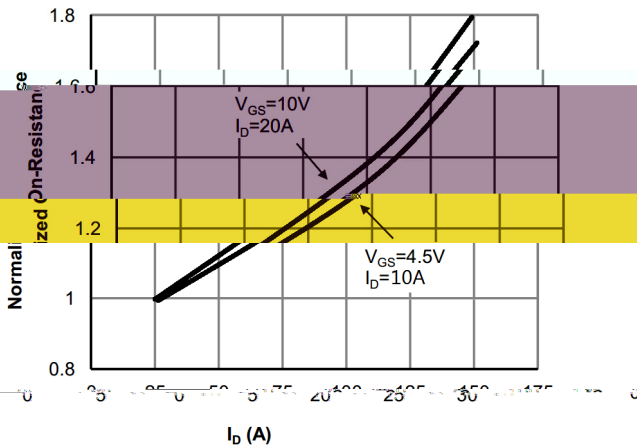
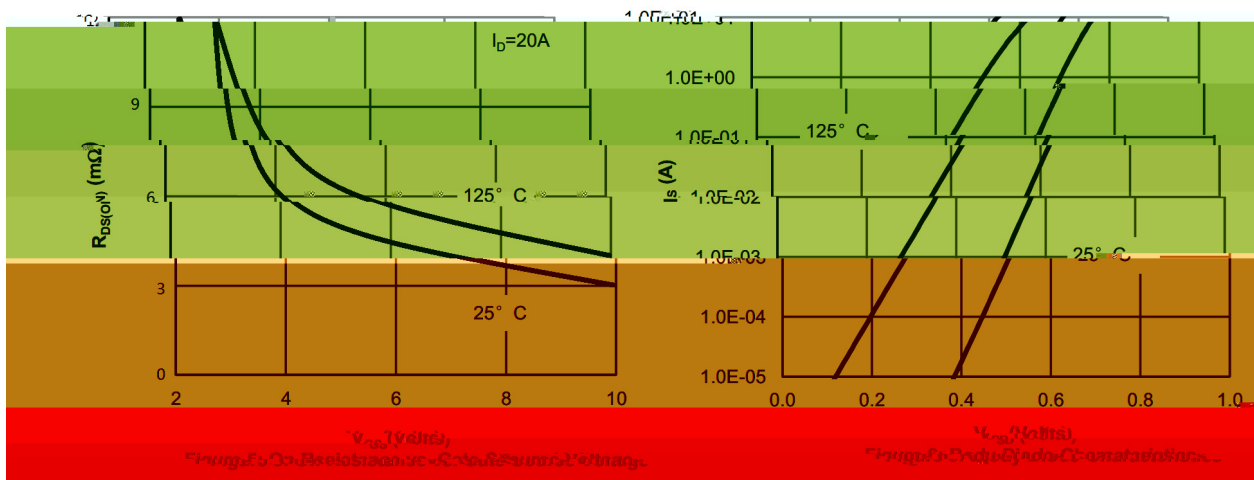


Figure 3: On-Resistance vs. Drain Current



/ Electrical Characteristic Curve

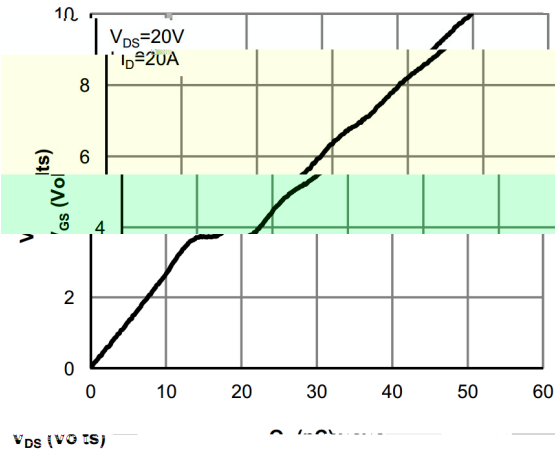


Figure 6: Drain-Source Characteristics

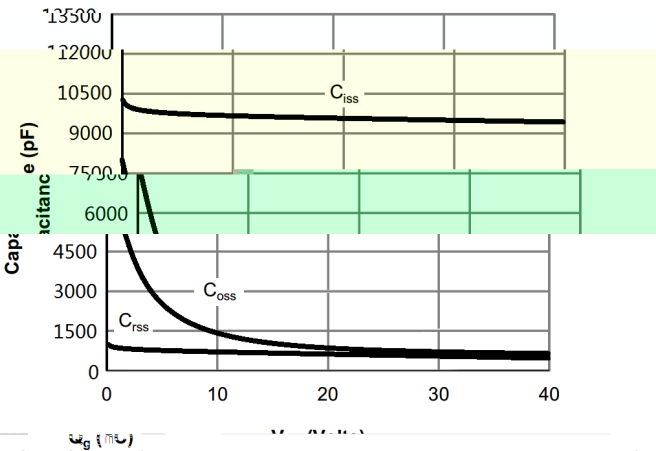


Figure 7: Gate-Charge Characteristics

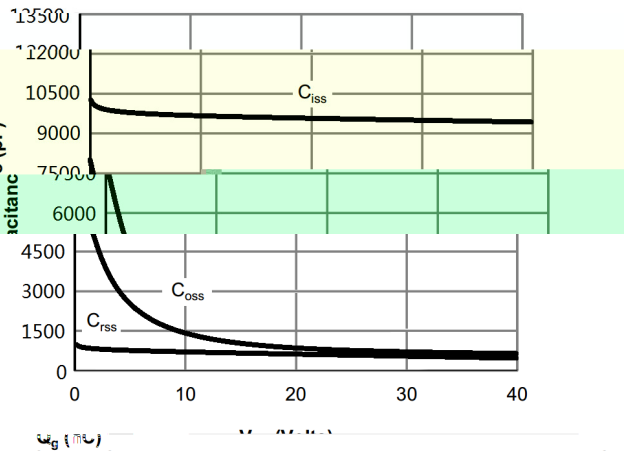


Figure 8: Capacitance Characteristics

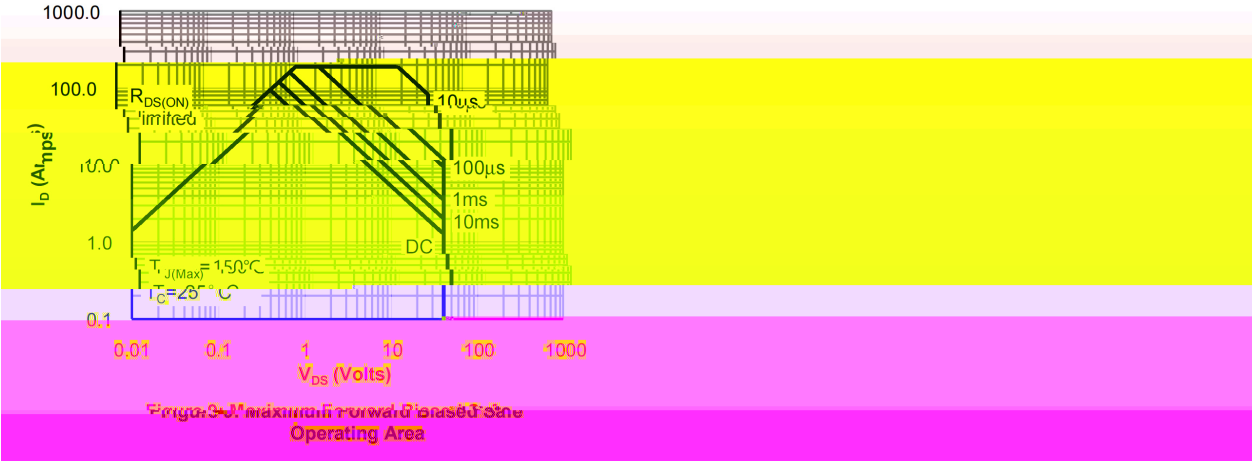


Figure 9: Maximum Forward Bias Safe Operating Area

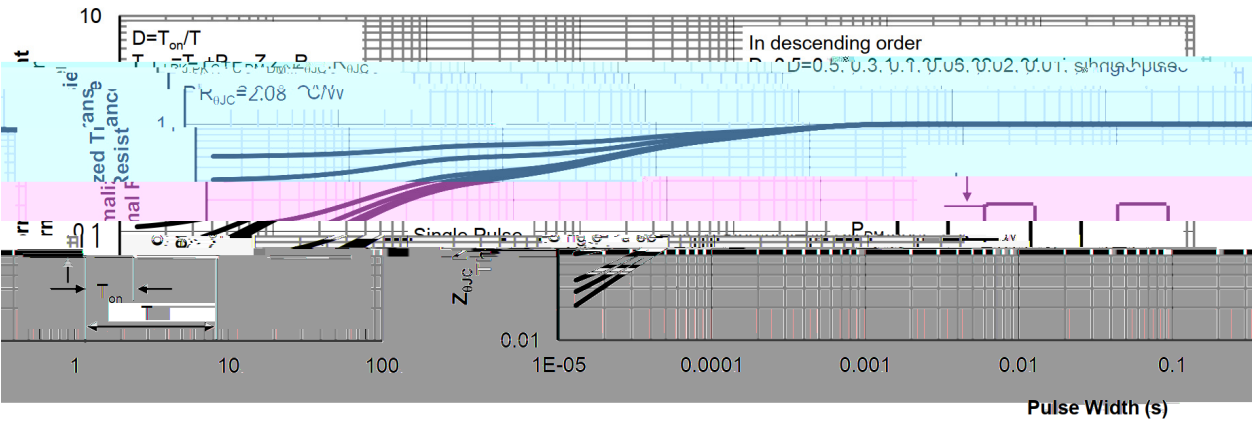
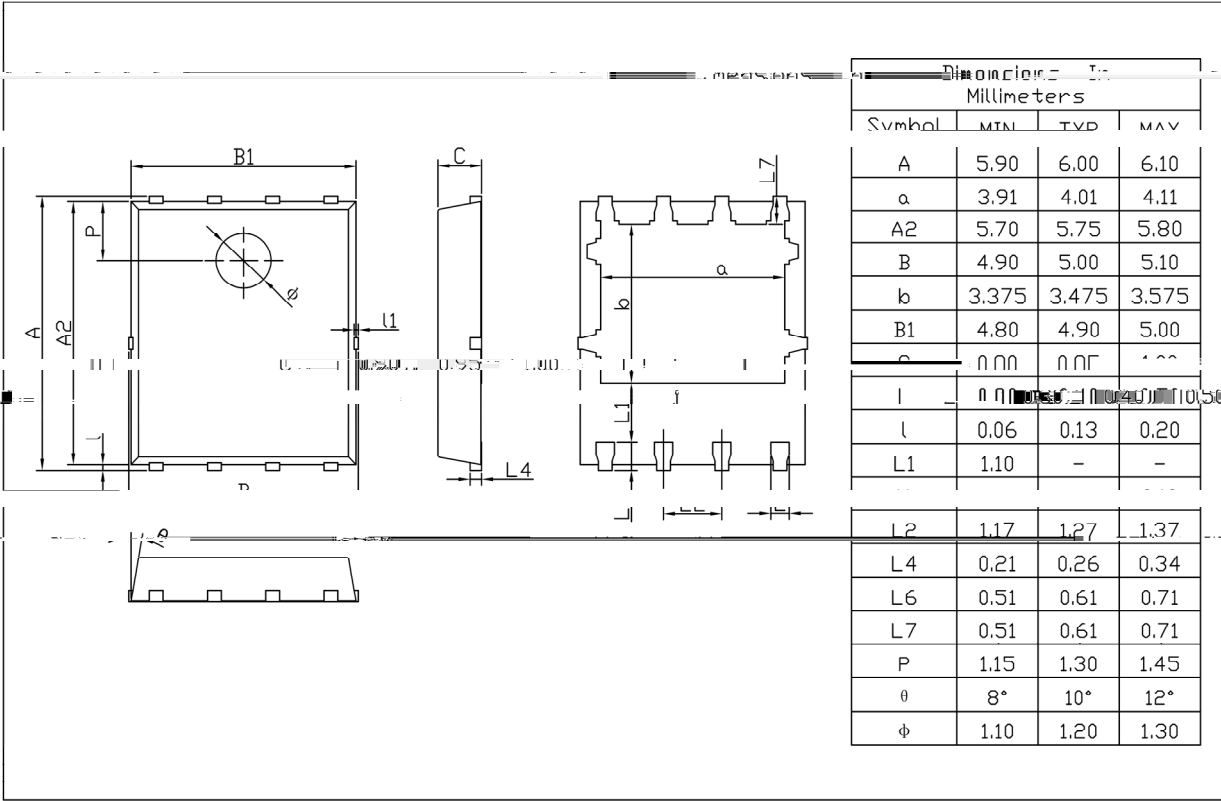


Figure 10: Normalized Maximum Transient Thermal Impedance

/ Package Dimensions

PDFN5×6

Unit:mm



Rev.01 202209

/ Marking Instructions

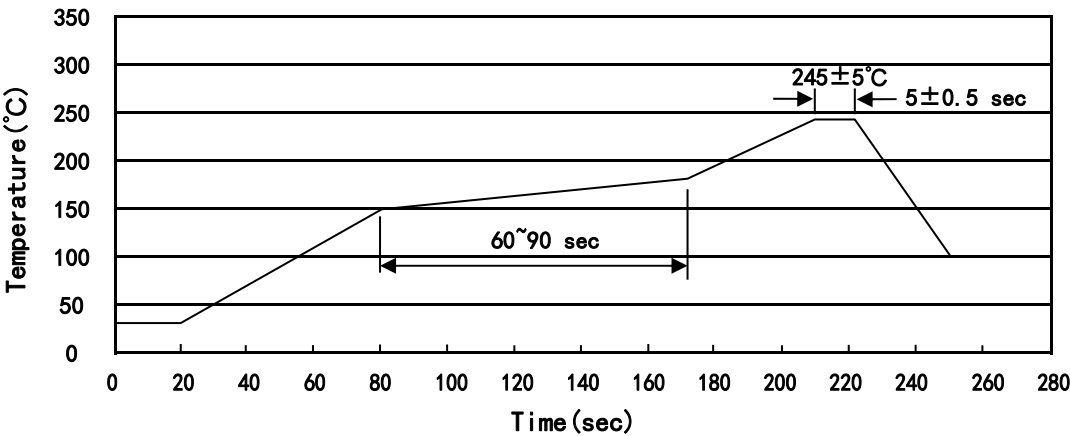


035N04S

Note

BR	Company Code
035N04S	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 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
PDFN5×6	5,000	2	10,000	6	60,000	13"×12	360×360×50	380×335×366

/ Notices