

/ Descriptions

PDFN5×6 N

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

/ Features

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

HF Product.

/ Applications

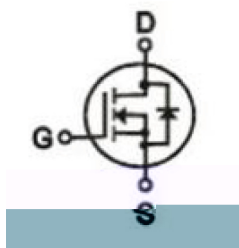
MB/NB/UMPC/VGA

Buck

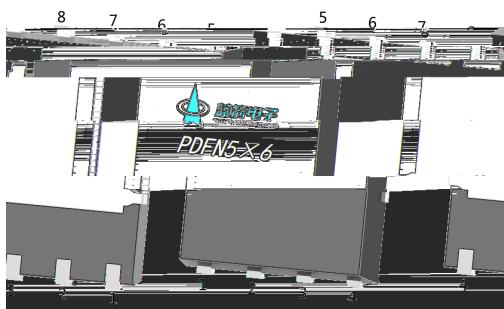
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Battery Management,High Frequency Point-of-Load Synchronous Buck Converter for MB/NB/UMPC/VGA,Networking DC-DC Power System,Load Switch.

/ Equivalent Circuit



/ Pinning



PIN1 2 3 S PIN4 G PIN5 6 7 8 D

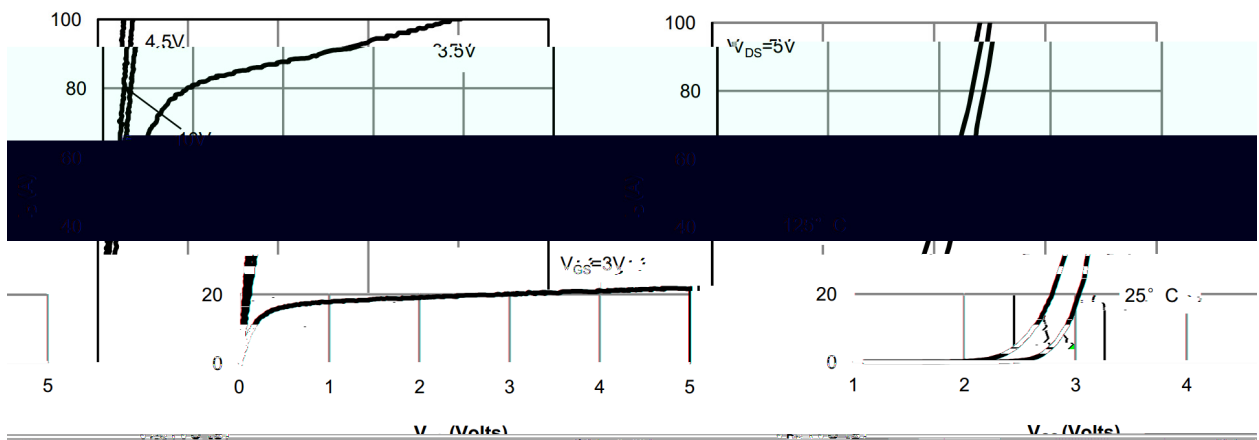
/ Marking

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		

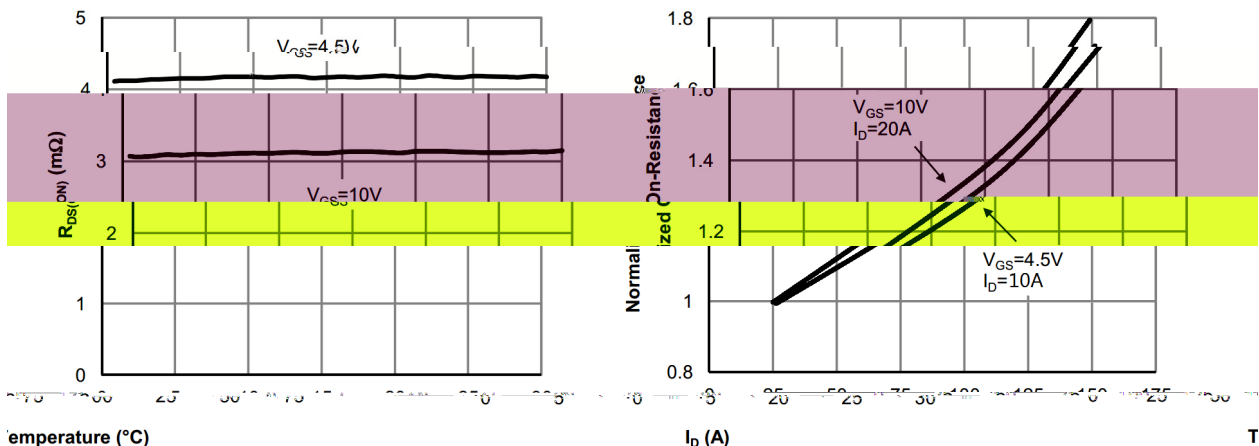
/ Electrical Characteristic Curve



On-Region Characteristics

Figure 2: Transfer Characteristics

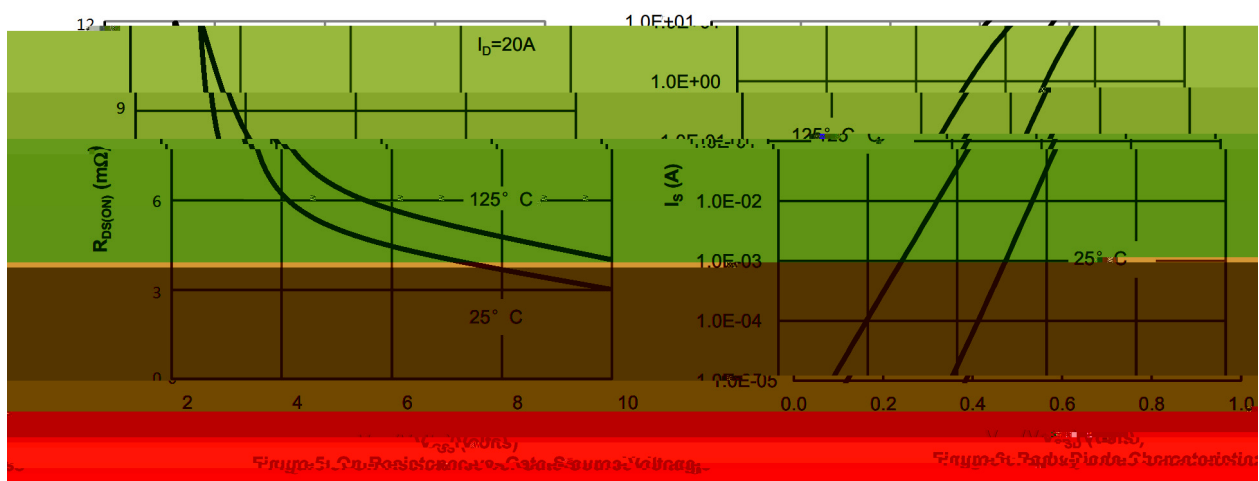
Figure 1: On-Region



On-Resistance vs. Junction Temperature

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

Figure 4: On-Resistance vs. Junction Temperature



/ Electrical Characteristic Curve

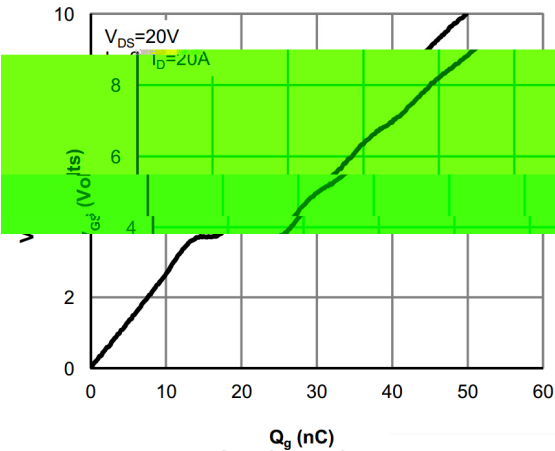


Figure 7: Gate-Charge Characteristics

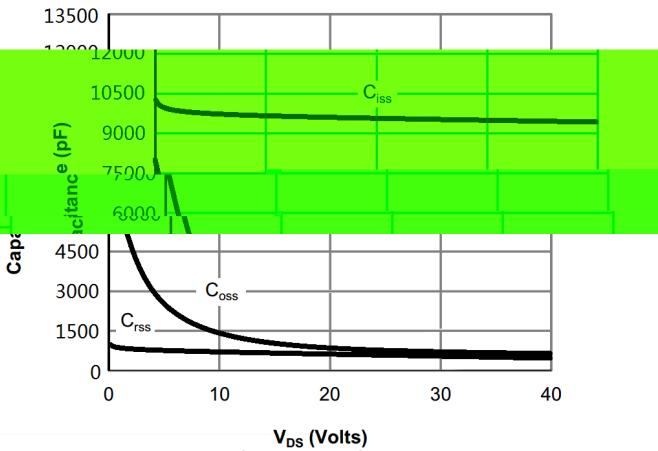
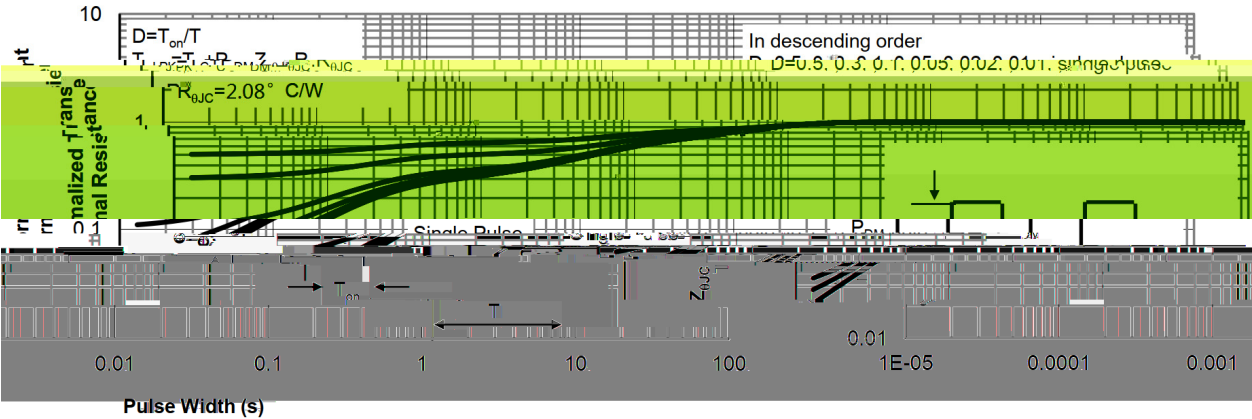
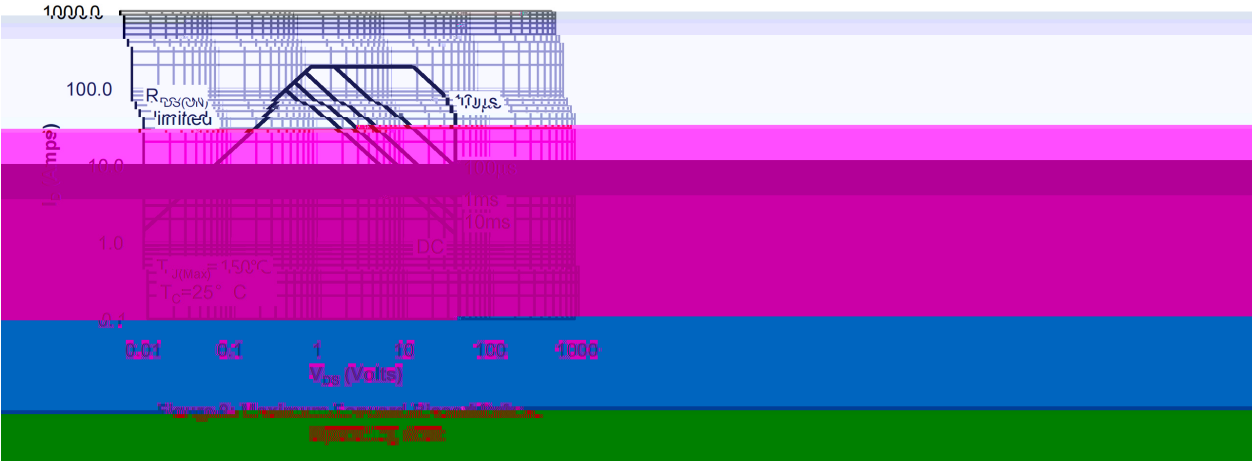


Figure 8: Capacitance Characteristics



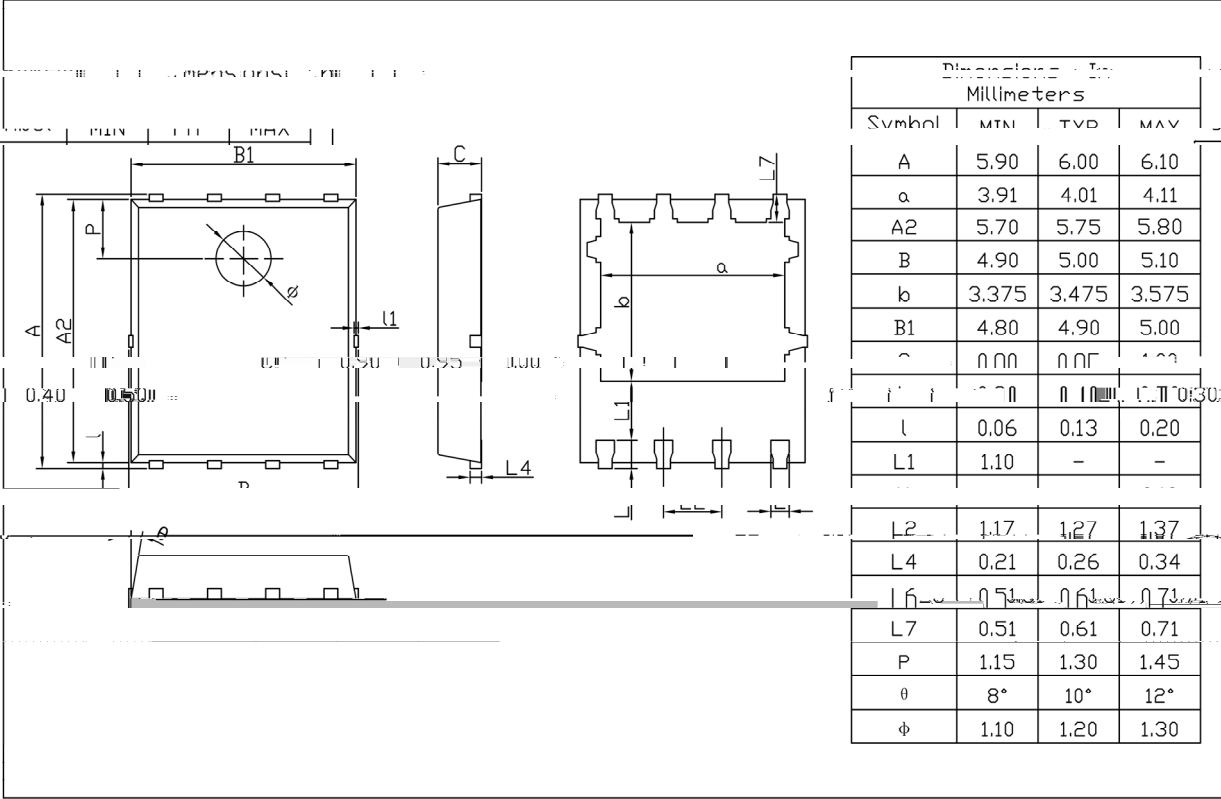
Normalized Maximum Transient Thermal Impedance

Figure 10: Normalized Maximum Transient Thermal Impedance

/ Package Dimensions

PDFN5×6

Unit:mm



Rev.01 202209

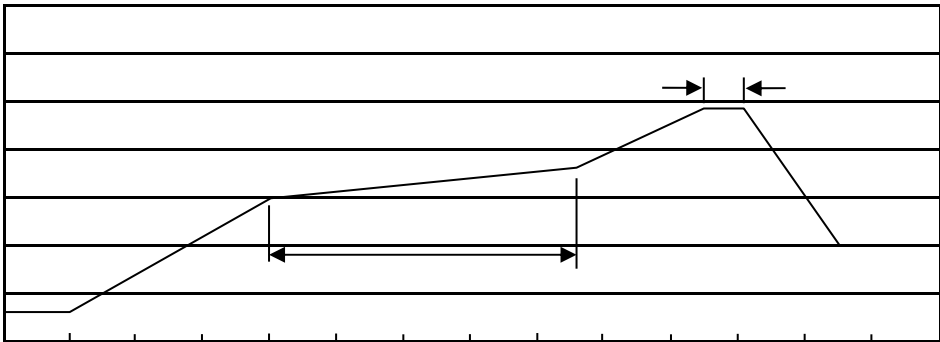
/ Marking Instructions



BR	
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					Dimension (unit mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
PDFN5×6	5,000	2	10,000	6	60,000	13"×12	360×360×50	380×335×366

/ Notices