/ Descriptions

PDFN5×6 N

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

/ Features

V_{DS}(V)=500V I_D=1.7A

$R_{DS(ON)}$@10V ≤ 3.5Ω(Typ. 2.8Ω)

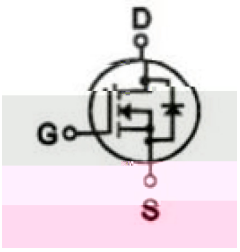
Fast Switching.

HF Product.

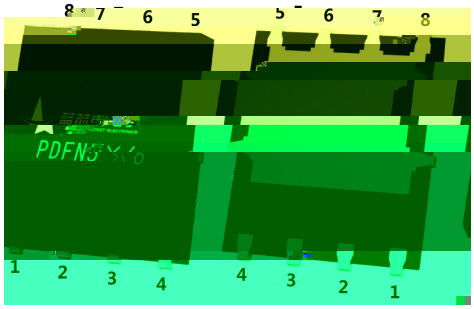
/ Applications

These devices are well suited for power switch circuit of adaptor and charger, intergrate fast recovery diode.

/ Equivalent Circuit



/ Pinning



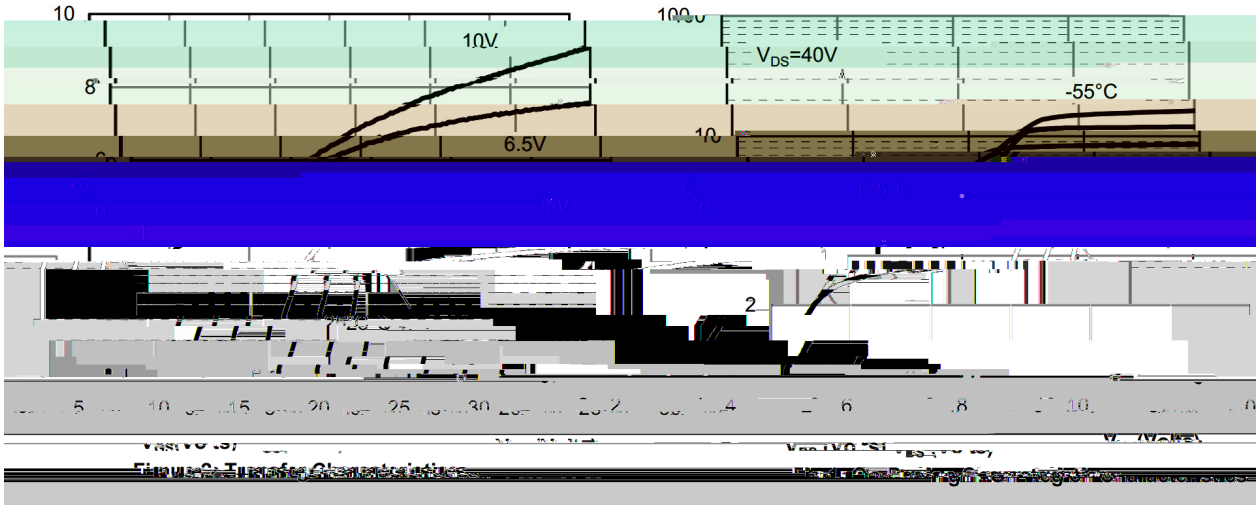
PIN1 2 3 S PIN4 G PIN5 6 7 8 D

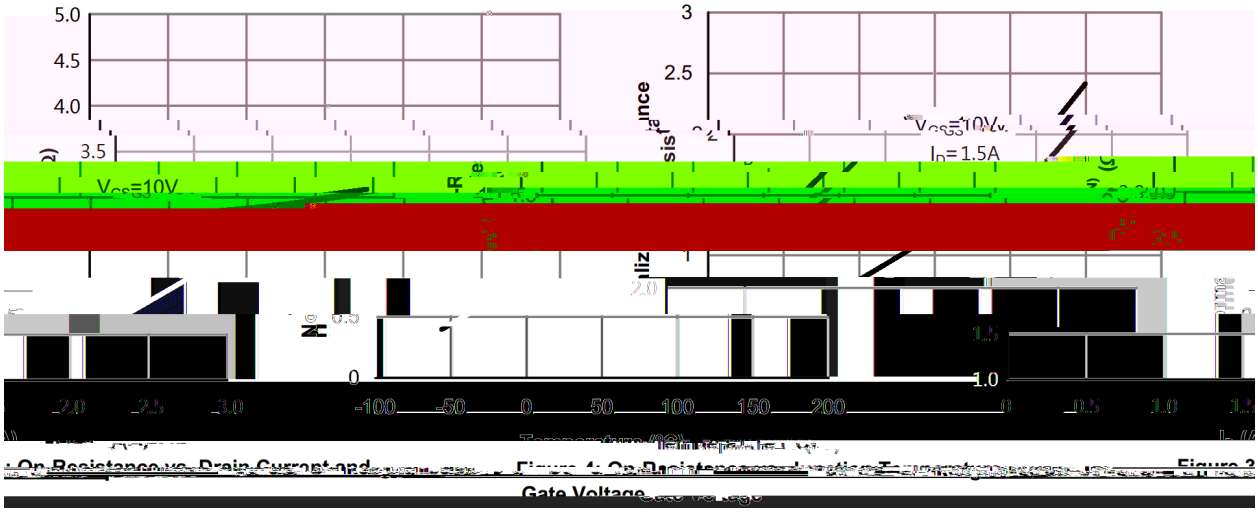
/ Marking

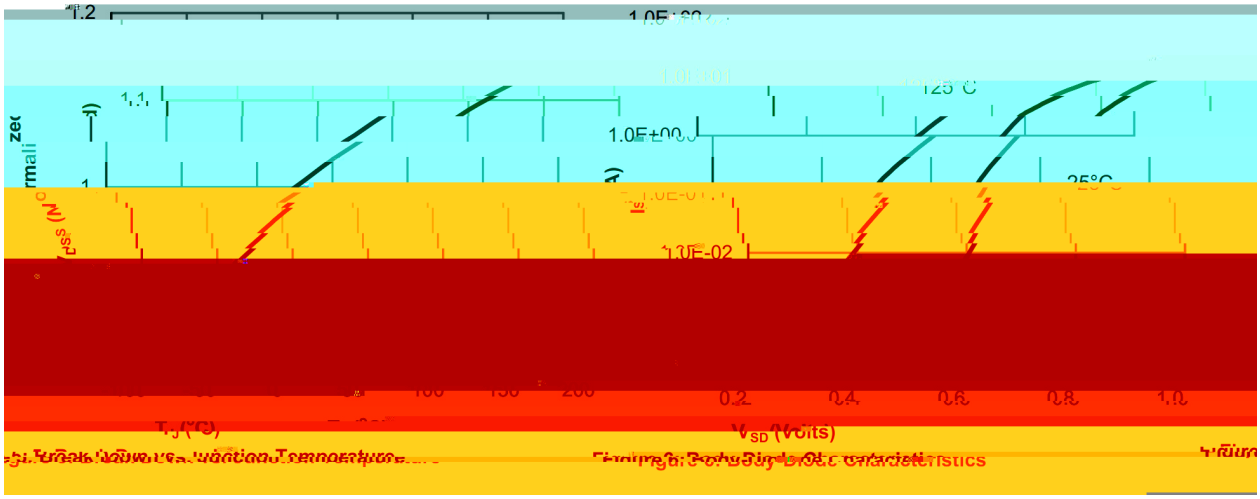
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	500	V
Drain Current	I_D(Tc=25)	1.7	A
Drain Current - Pulsed	I_{DM}	5.5	A
Gate-Source Voltage	V_{GS}	±30	V
Single Pulsed Avalanche Energy	E_{AS}	112.5	mJ
Avalanche Current	I		

/ Electrical Characteristic Curve







/ Electrical Characteristic Curve

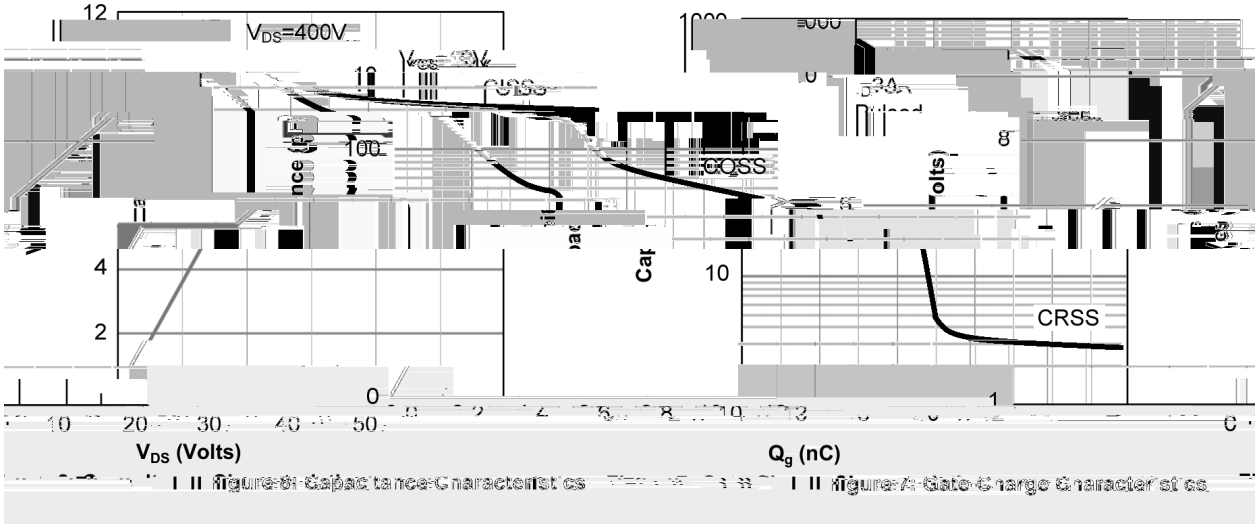


Figure 3: Capacitance Characteristics　　Figure 4: Gate Charge Characteristics

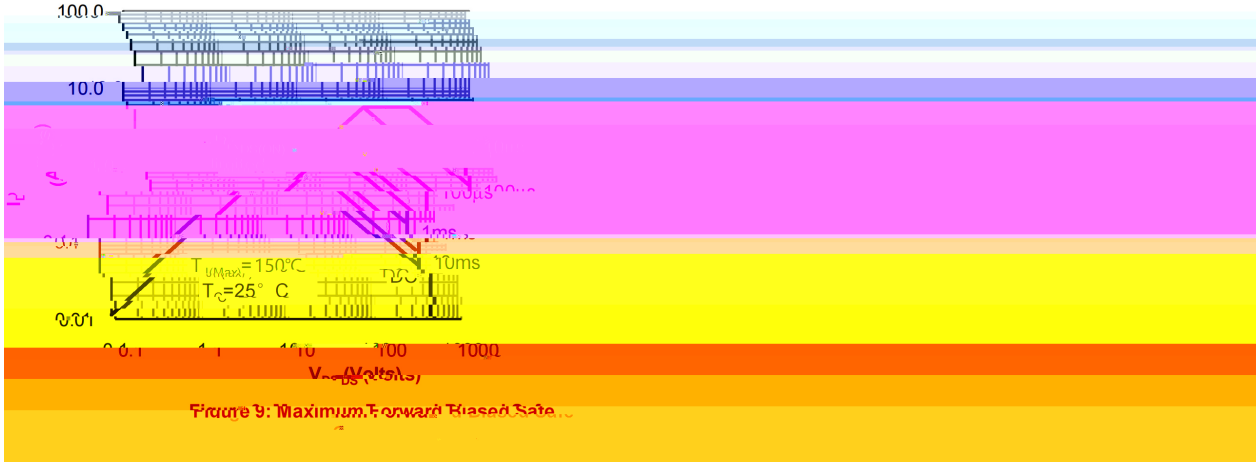


Figure 5: Maximum Forward Biased Safe

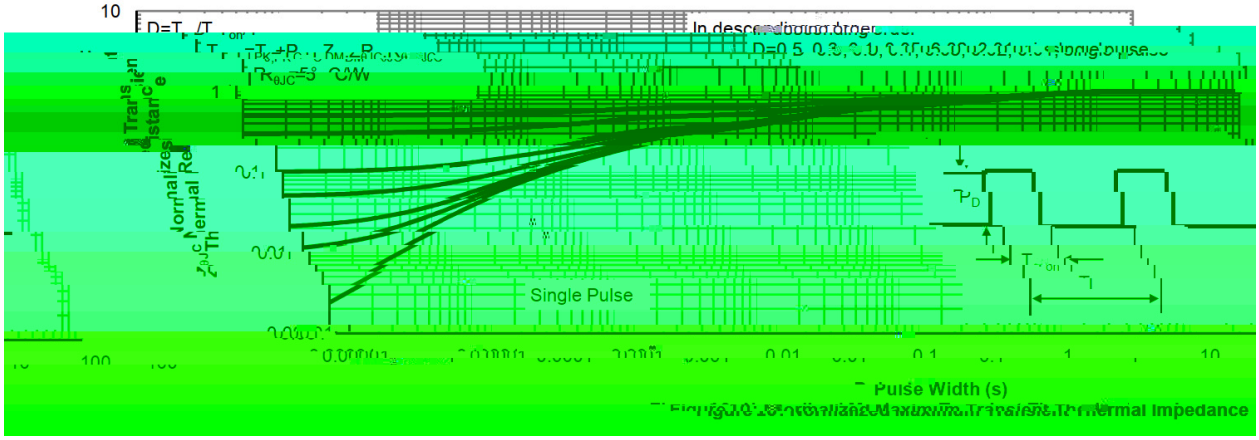
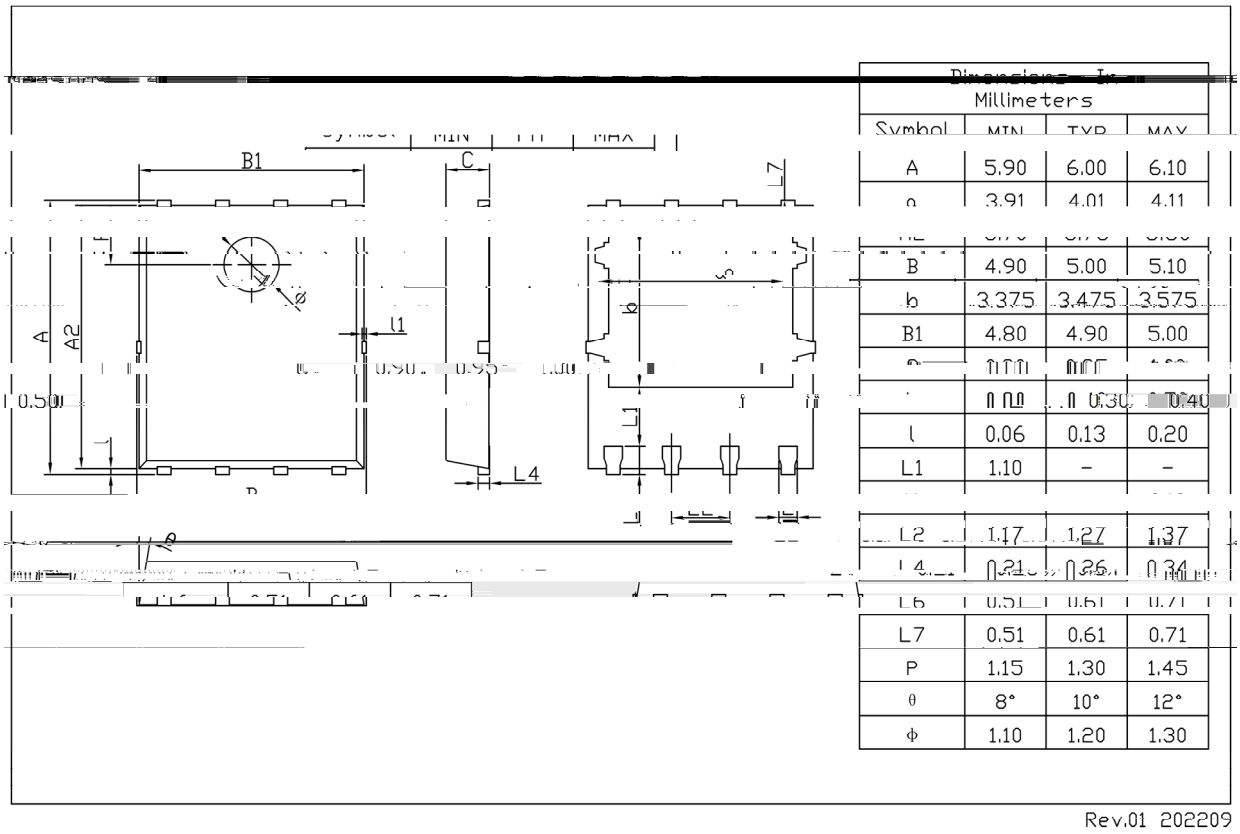


Figure 6: Normalized Maximum Transient Thermal Impedance

/ Package Dimensions

PDFN5×6 Unit:mm



Dimensions In Millimeters			
Symbol	MIN	TYP	MAX
A	5.90	6.00	6.10
[illegible]	3.91	4.01	4.11
B	4.90	5.00	5.10
b	3.375	3.475	3.575
B1	4.80	4.90	5.00
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible] 0.30	0.40
l	0.06	0.13	0.20
L1	1.10	–	–
[illegible]			
L2	1.17	1.27	1.37
L4	[illegible] 0.21	[illegible] 0.26	0.34
L6	0.51	0.61	0.71
L7	0.51	0.61	0.71
P	1.15	1.30	1.45
θ	8°	10°	12°
Φ	1.10	1.20	1.30

Rev.01 202209

/ Marking Instructions

BR

3N50AF

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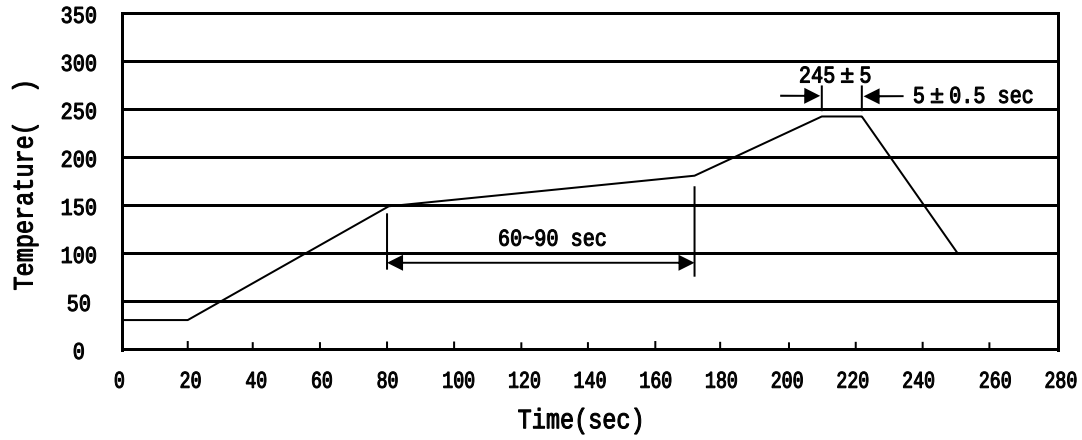
Note

BR	Company Code
3N50AF	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：mm³)
	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