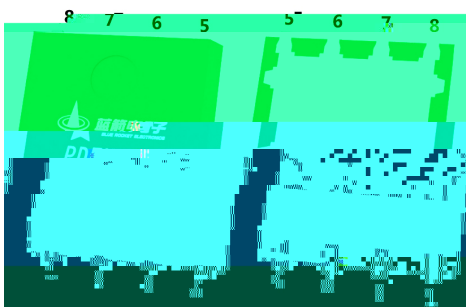
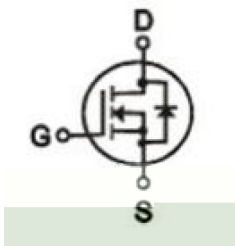


PDFN5×6 N
 N-Channel MOSFET in a PDFN5×6 Plastic Package.

$V_{DS}(V)=30\text{ V}$ $I_D=124\text{ A}$
 $R_{DS(ON)}@10V\leq 2.5\text{ m}\Omega$ (Typ.1.4mR)
 $R_{DS(ON)}@4.5V\leq 4.0\text{ m}\Omega$ (Typ.2.5mR)
 HF Product.

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



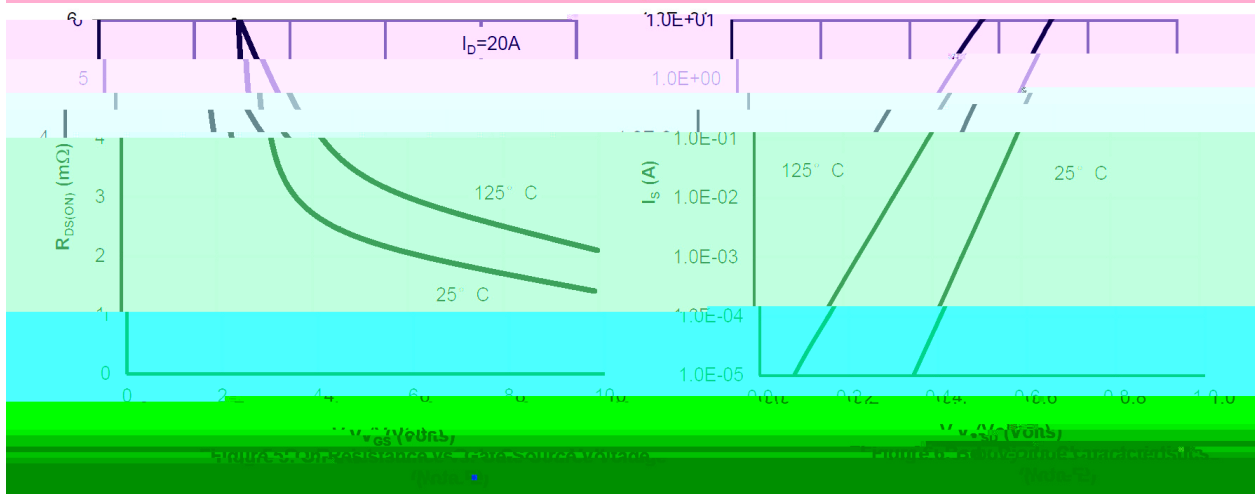
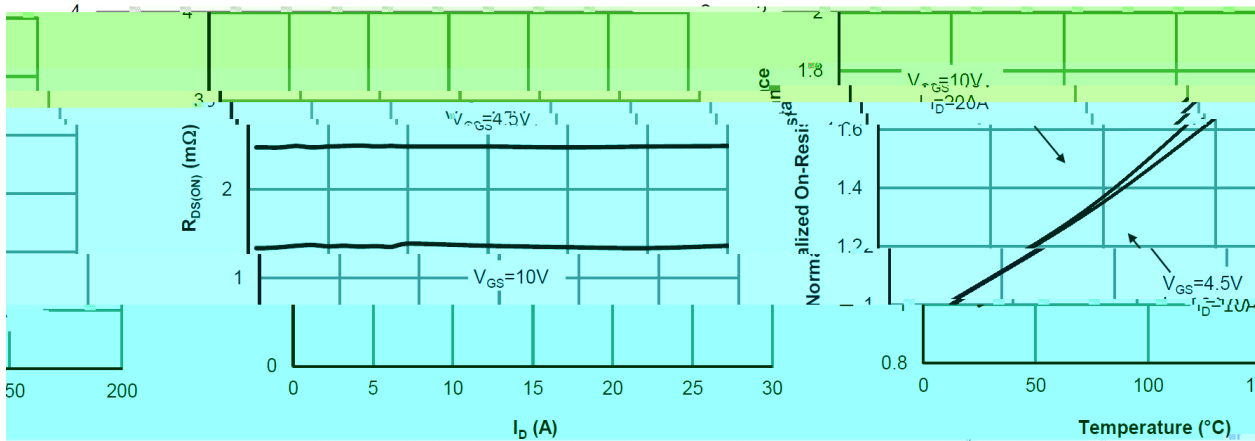
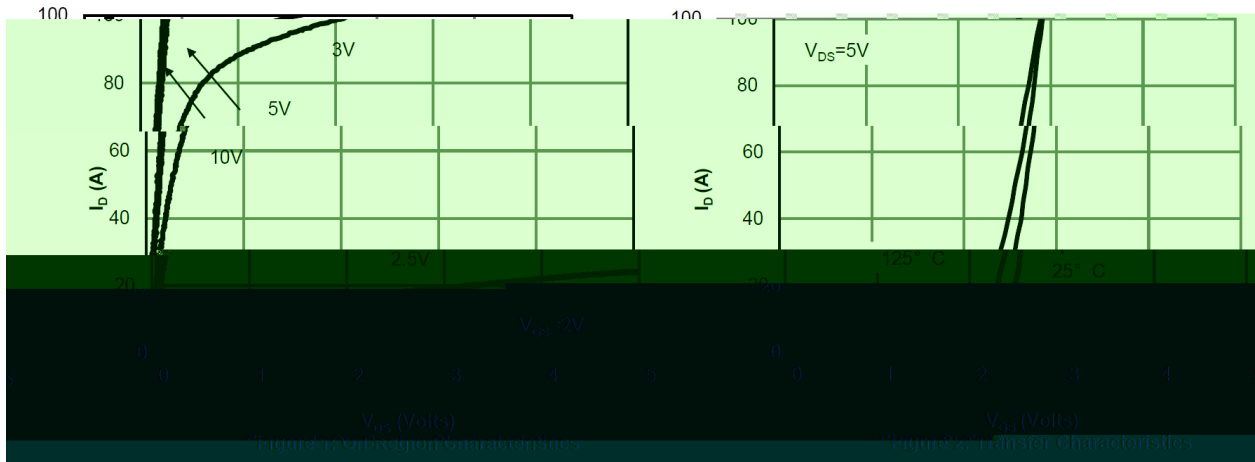
PIN1 2 3 S PIN4 G PIN5 6 7 8 D

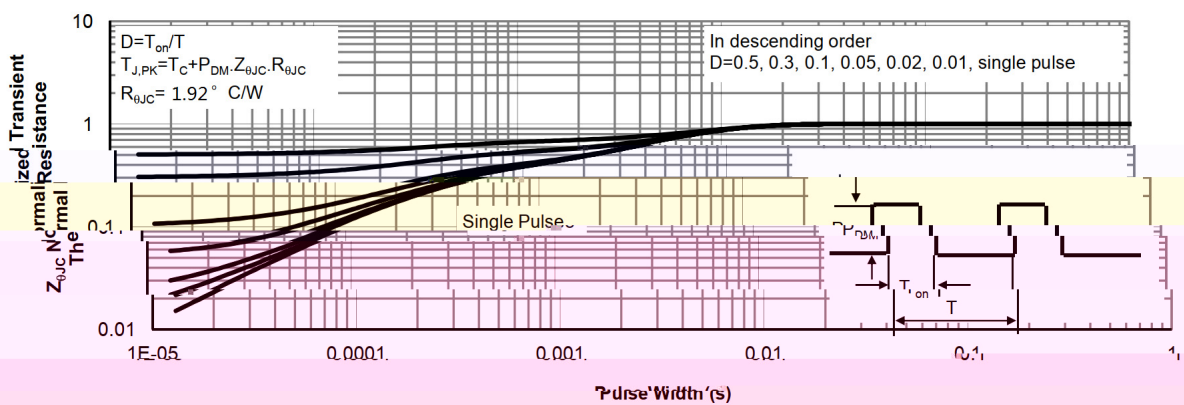
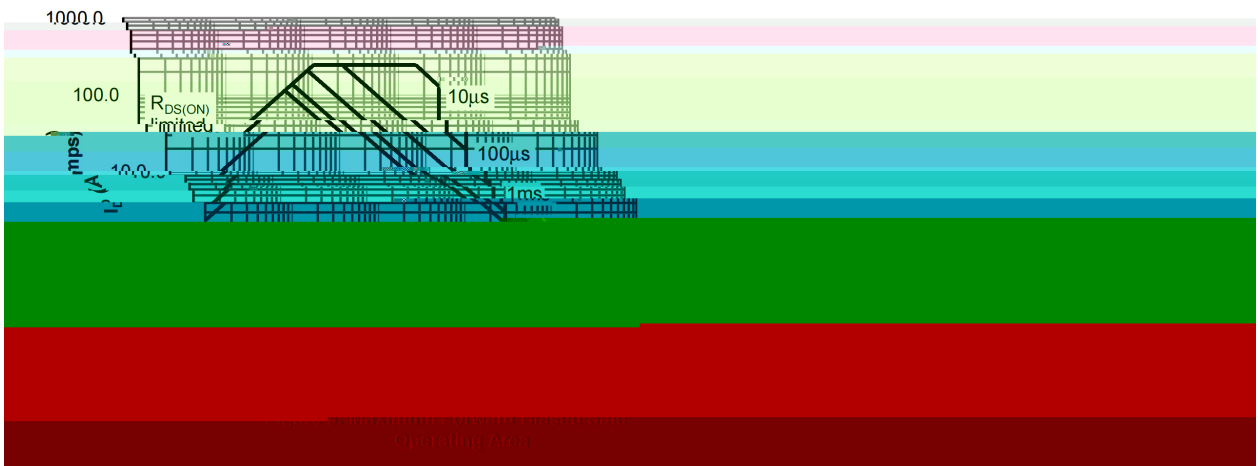
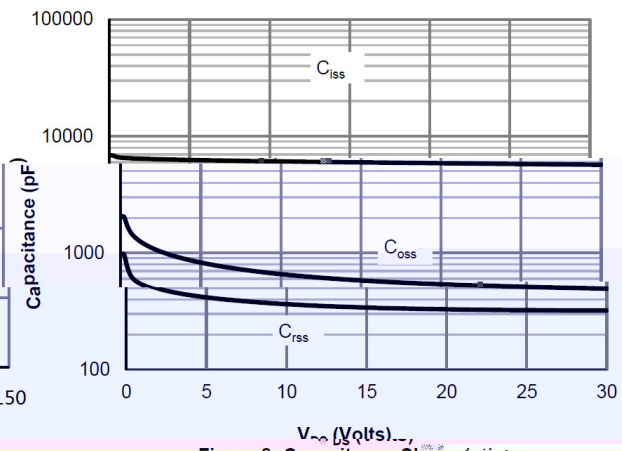
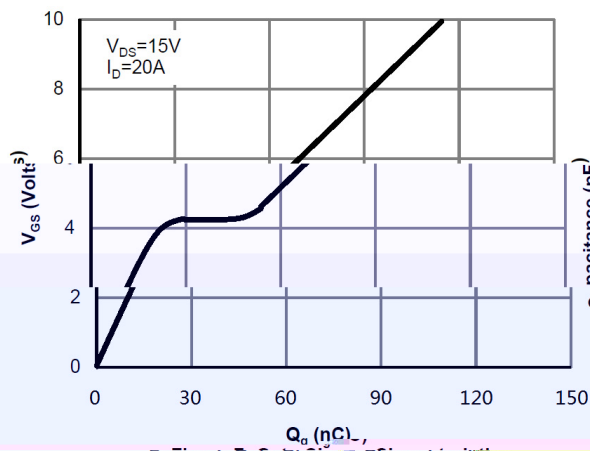
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Continuous Drain Current	$I_D(T_c=25^\circ\text{C})$	124	A
Pulsed Drain Current	I_{DM}	248	A
Gate-Source Voltage	V_{GS}	20	V
Power Dissipation	$P_D(T_c=25^\circ\text{C})$	65	W
Avalanche energy(L=0.5mH)	E_{AS}	810	mJ
Avalanche Current(L=0.5mH)	I_{AS}	46.5	A
Junction and Storage Temperature Range	T_j, T_{stg}	-55 to 150	
Maximum Junction-to-Ambient	R_{JA}	50	$^\circ\text{C/W}$
Maximum Junction-to-Case	R_{JC}	1.92	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$I_D=250\mu\text{A}, V_{GS}=0\text{V}$	30	33.5		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=30\text{V}, V_{GS}=0\text{V}$			1.0	μA
Gate-Body leakage current	I_{GSS}	$V_{DS}=0\text{V}, V_{GS}=\pm 20\text{V}$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu\text{A}$	1	1.5	2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10\text{V}, I_D=20\text{A}$		1.4	2.5	m Ω
		$V_{GS}=4.5\text{V}, I_D=10\text{A}$		2.5	4.0	
Diode Forward Voltage	V_{SD}	$I_S=1\text{A}, V_{GS}=0\text{V}$			1.4	V
Input Capacitance	C_{iss}	$V_{DS}=25\text{V}, V_{GS}=0\text{V}, f=1.0\text{MHz}$		5800		pF
Output Capacitance	C_{oss}			500		
Reverse Transfer Capacitance	C_{rss}			465		
Gate resistance	R_g	$V_{GS}=0\text{V}, V_{DS}=0\text{V}, f=1\text{MHz}$		1.1		Ω

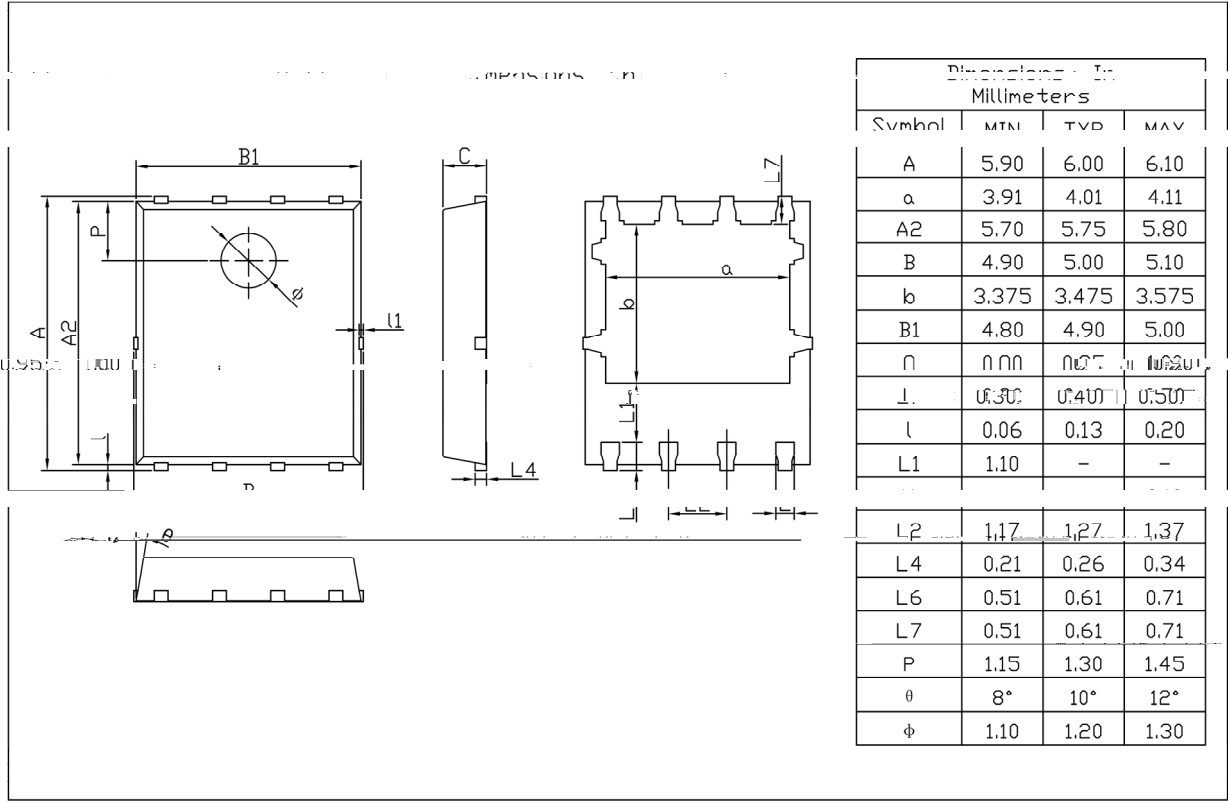
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	$Q_{g(10V)}$	$V_{GS}=10V$ $V_{DS}=15V$ $I_D=20A$		115.2		nC
Total Gate Charge	$Q_{g(4.5V)}$			55.3		
Gate Source Charge	Q_{gs}			11.0		
Gate Drain Charge	Q_{gd}			23.6		
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=15V$ $I_D=20A$ $R_G=3\Omega$		17.2		ns
Turn-On Rise Time	t_r			53.3		
Turn-Off Delay Time	$t_{d(off)}$			80.9		
Turn-Off Fall Time	t_f			35.3		



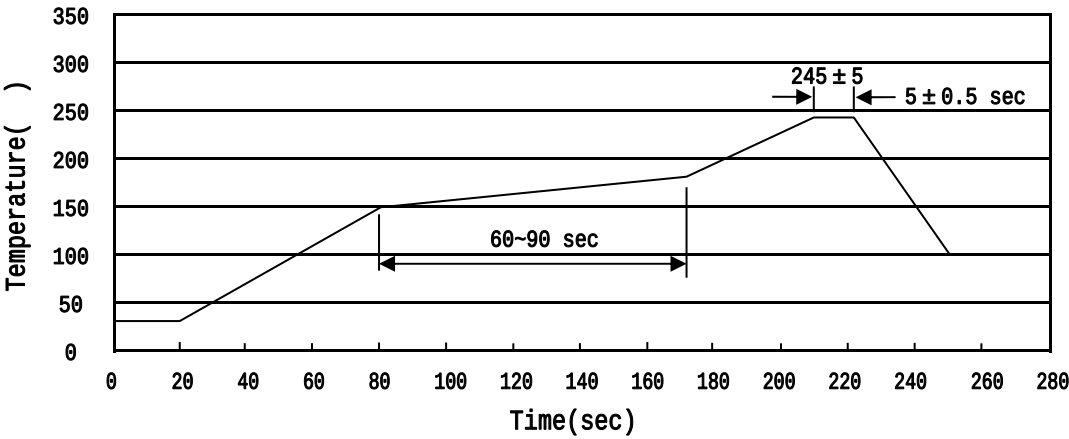


PDFN5 X6

Unit:mm



Rev.01 202209



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.

260±5

10±1 sec.

Temp.:260±5℃

Time:10±1 sec

/ 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

All information provided in this document is subject to legal disclaimers.