

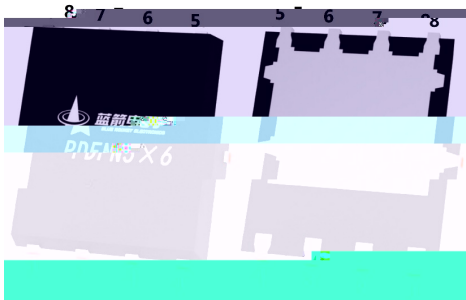
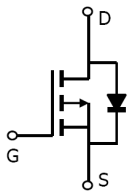
Rev.B Sep.-2024

PDFN5Ø6 P
 P-Channel MOSFET in a PDFN5×6 Plastic Package.

$V_{DS}(V)=-30V$ $I_D=-30A$
 $R_{DS(ON)}@-10V<20m\Omega$ (TYP. 17.5m Ω)
 $R_{DS(ON)}@-4.5V<30m\Omega$ (TYP. 25.5m Ω)
 。 HF Product.

/

Notebook AC-in Load Switch,Battery Protection Charge/Discharge.



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
Drain Current - Continuous		$I_D(T_c=25^{\circ}\text{C})$	-30	A
Drain Current – Pulsed		I_{DM}	-92	A
Gate-Source Voltage		V_{GS}	± 20	V
Power Dissipation		$P_D(T_c=25^{\circ}\text{C})$	28	W
Single Pulse Avalanche Energy(L=0.5mH)		E_{AS}	152	mJ
Avalanche Current(L=0.5mH)		I_{AS}	19.5	A
Junction and Storage Temperature Range		T_j, T_{stg}	-55 to 150	$^{\circ}\text{C}$
Thermal resistance, junction - ambient	$t \leq 10\text{s}$	$R_{\theta JA}$	28	/ W
	Steady-State		62	
Thermal resistance, junction - case	Steady-State	$R_{\theta JC}$	4.5	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=-10V$ $V_{DS}=-15V$ $R_L=1.5\ \Omega$ $R_{GEN}=3\ \Omega$		10		ns
Turn-On Rise Time	t_r			5.5		
Turn-Off Delay Time	$t_{d(off)}$			26.1		
Turn-Off Fall Time	t_f			9.1		

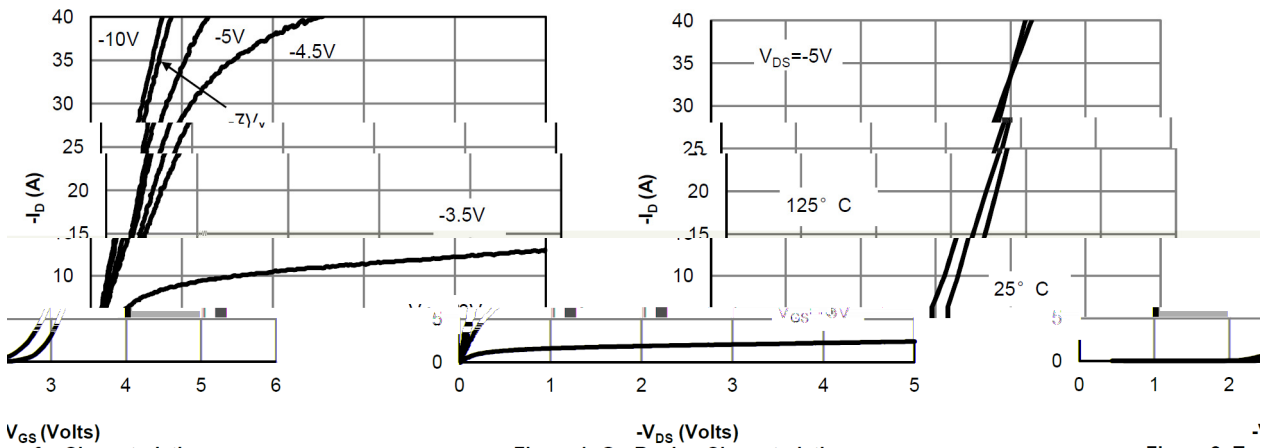


Figure 1: On-Region Characteristics

Figure 2: Transfer Characteristics

Figure 3: Transfer Characteristics

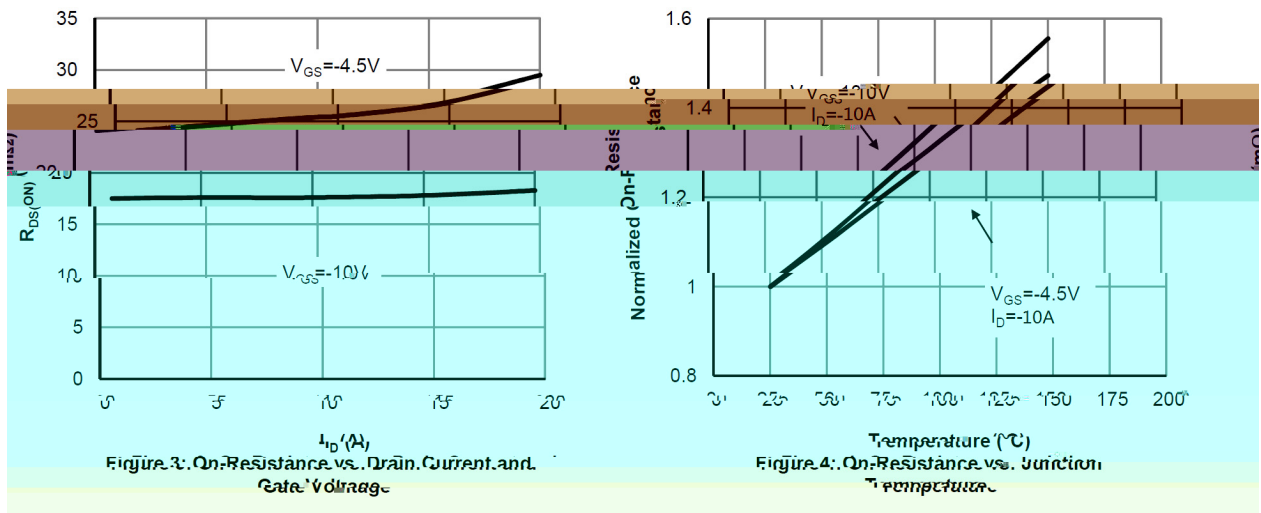


Figure 3: On-Resistance vs. Drain Current and Gate Voltage

Figure 4: On-Resistance vs. Junction Temperature

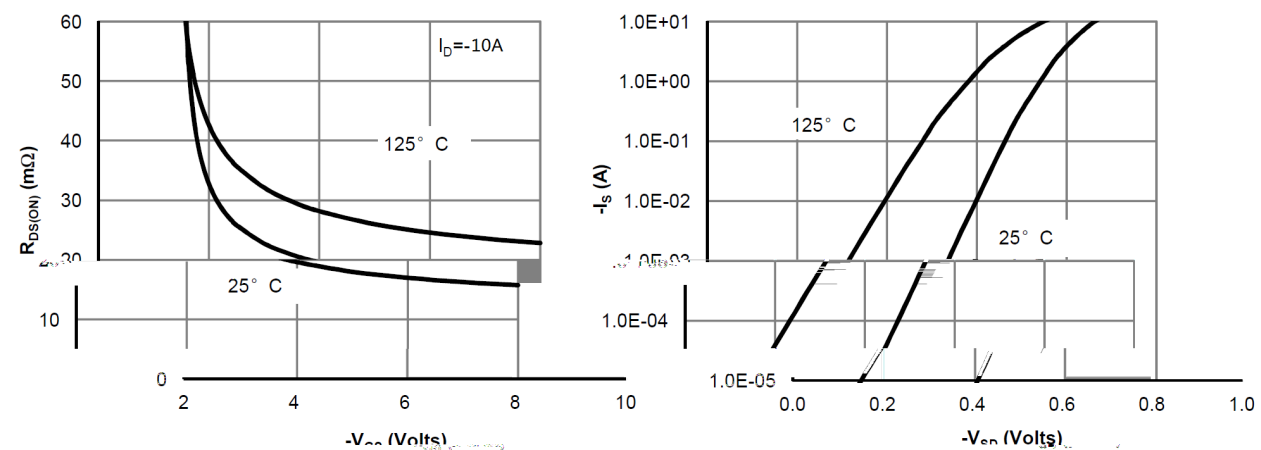


Figure 5: On-Resistance vs. Gate-Source Voltage

Figure 6: Body-Diode Characteristics

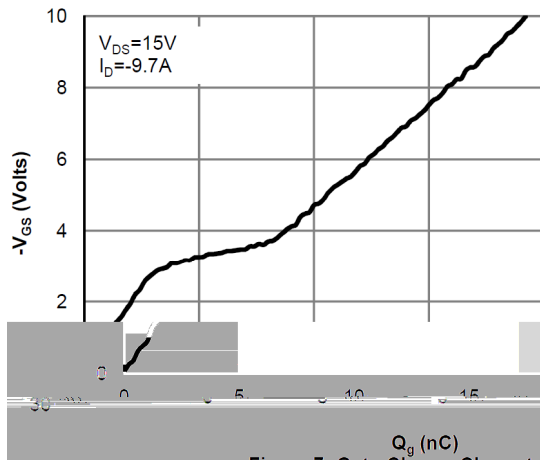


Figure 7: Gate-Charge Characteristics

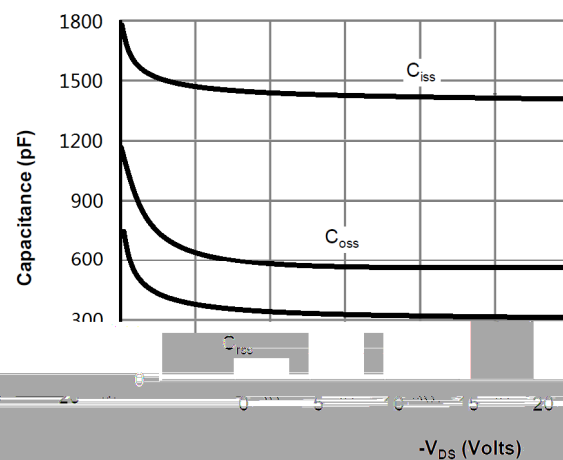


Figure 8: Capacitance Characteristics

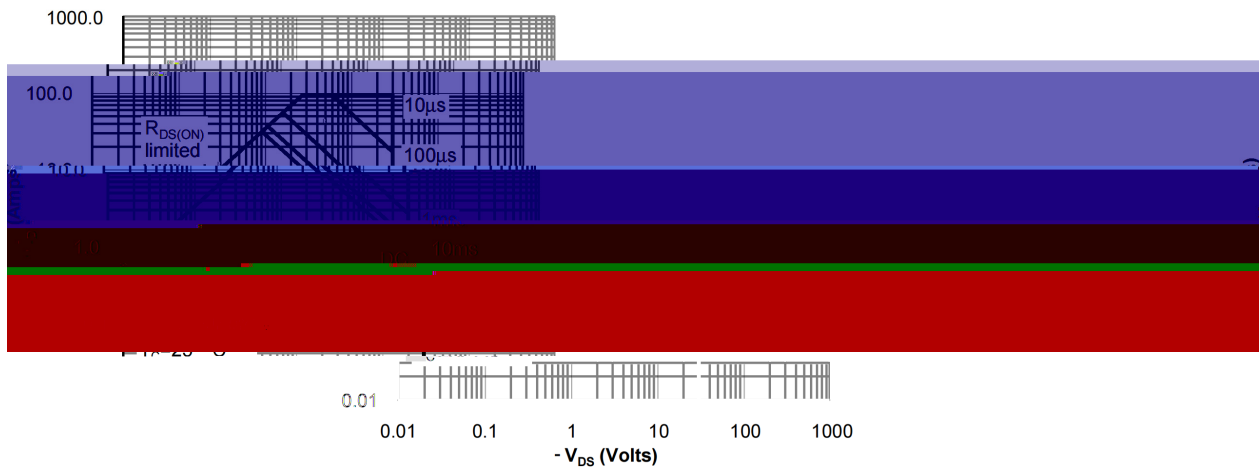


Figure 9: Maximum Safe Operating Area

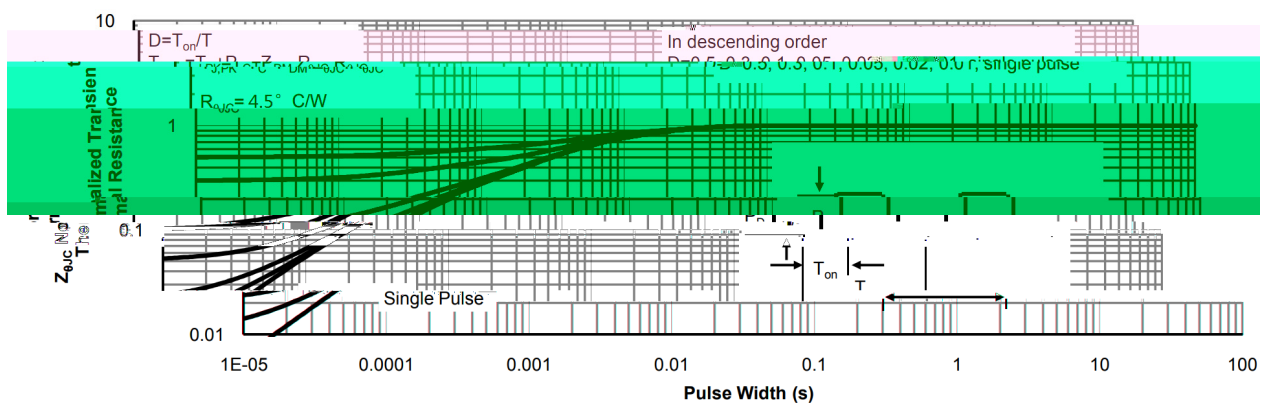
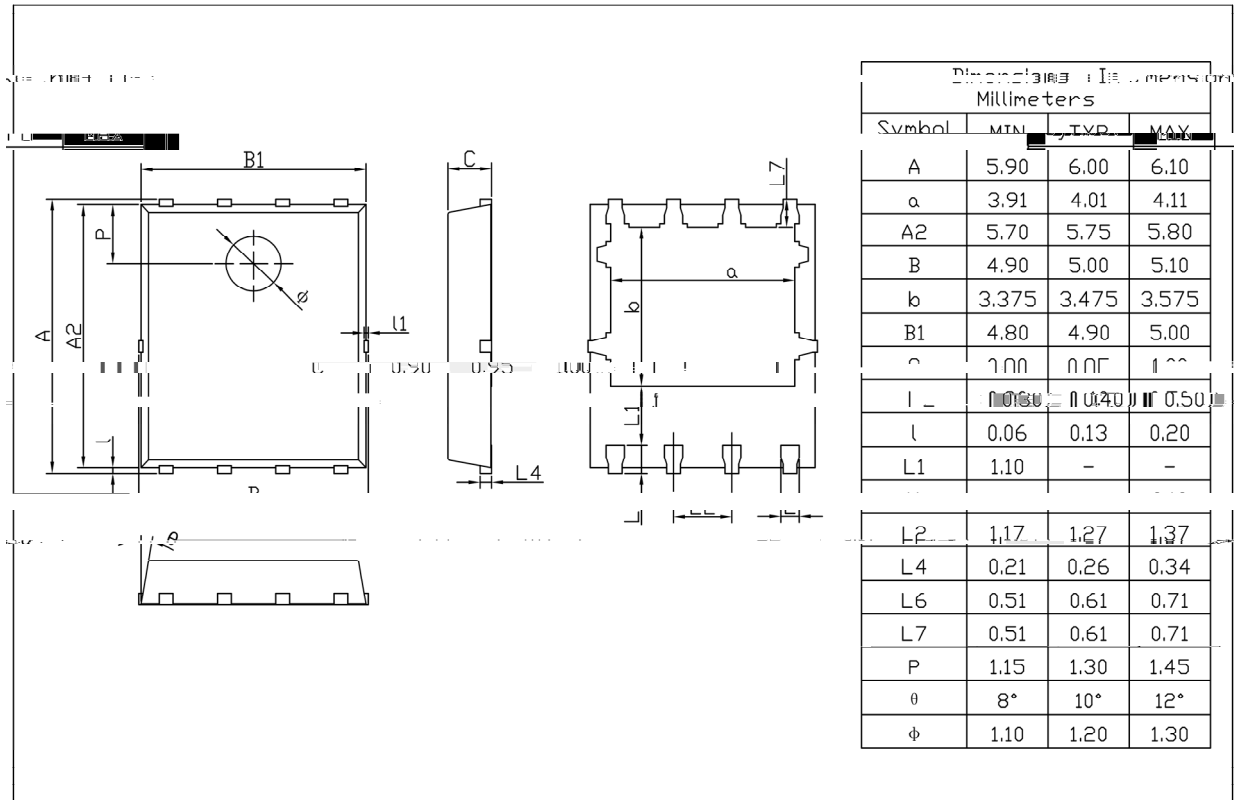


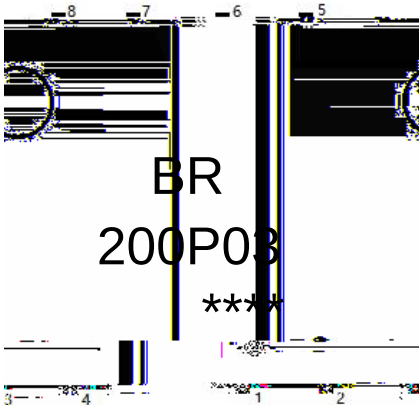
Figure 10: Normalized Maximum Transient Thermal Impedance

PDFN5 X6

Unit:mm



Rev.01 202209



EU	
200P03	

Note	
BR	Company Code
200P03	Product Type Code
****.	Lot No. Code, code change with Lot No

Temperature Profile for IR Reflow Soldering(Pb-Free)

- 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		
	2	2	2	2		