


1 Absolute Maximum Ratings(Ta=25℃)

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DS}	30	V
Drain Current		$I_D(T_C=25^\circ\text{C})$	20	A
Drain Current - Pulsed		I_{DM}	55	A
Gate-Source Voltage		V_{GS}	± 20	V
Single Pulsed Avalanche Energy		E_{AS}	199	mJ
Avalanche Current		I_{AS}	12.9	A
Power Dissipation		$P_D(T_C=25^\circ\text{C})$	15.5	W
Operating and Storage Temperature Range		T_J, T_{stg}	-55 to 150	
Junction-to-Ambient	$t \leq 10$	$R_{\theta JA}$	30	/W
Junction-to-Ambient	Steady-State		60	
Junction-to-Case	Steady-State	$R_{\theta JC}$	8	

/ Electrical Characteristic Curve

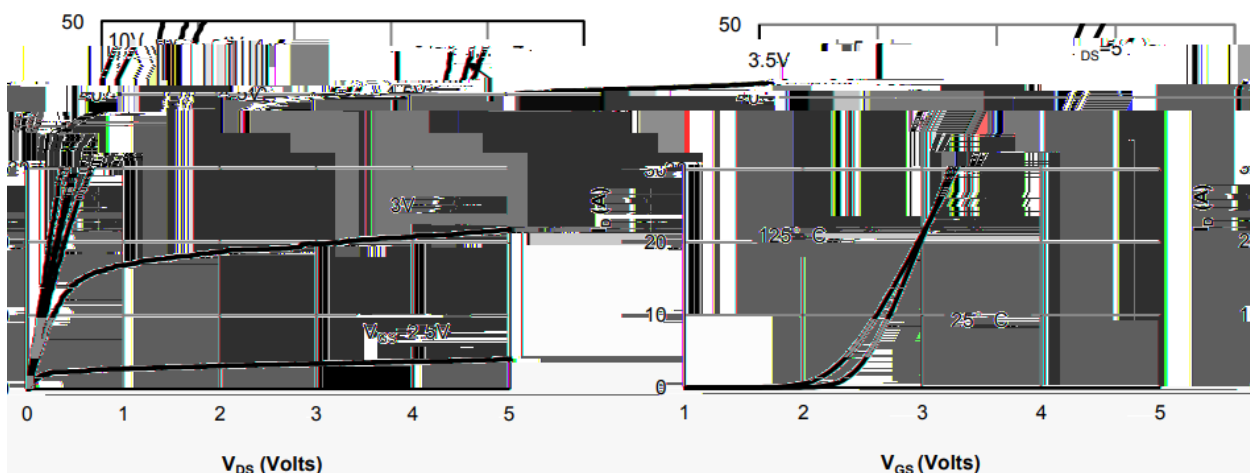


Figure 1: On-Resistance Characteristic

Figure 2: Transfer Characteristic

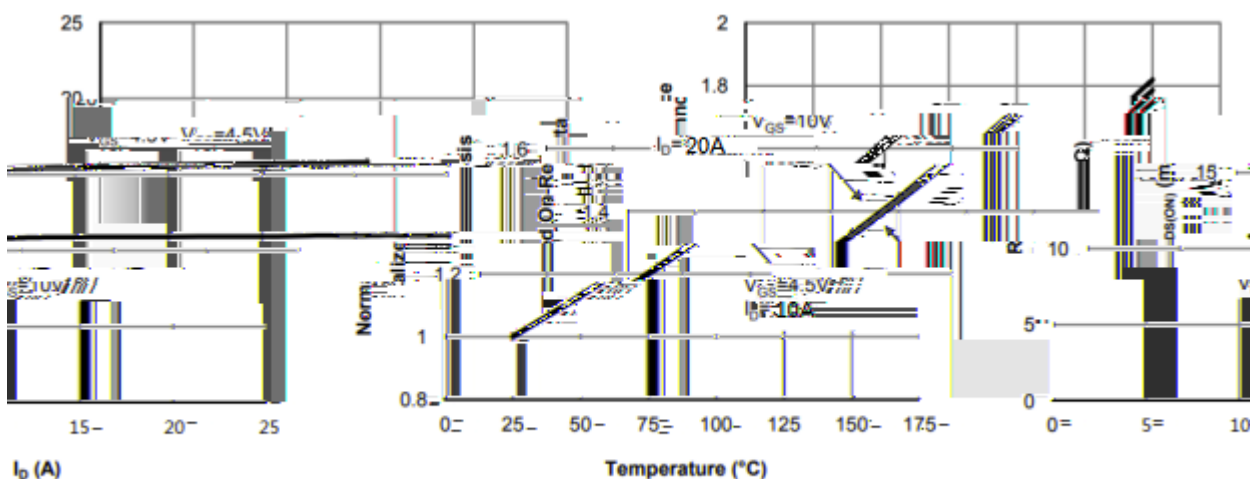


Figure 3: Thermal Resistance Characteristic

Figure 4: Power Dissipation Characteristic

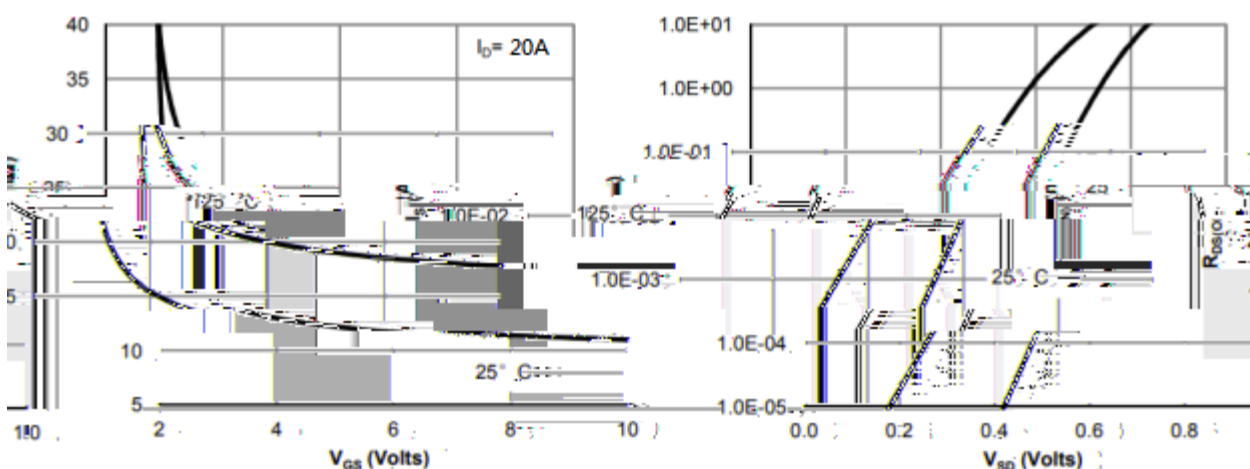
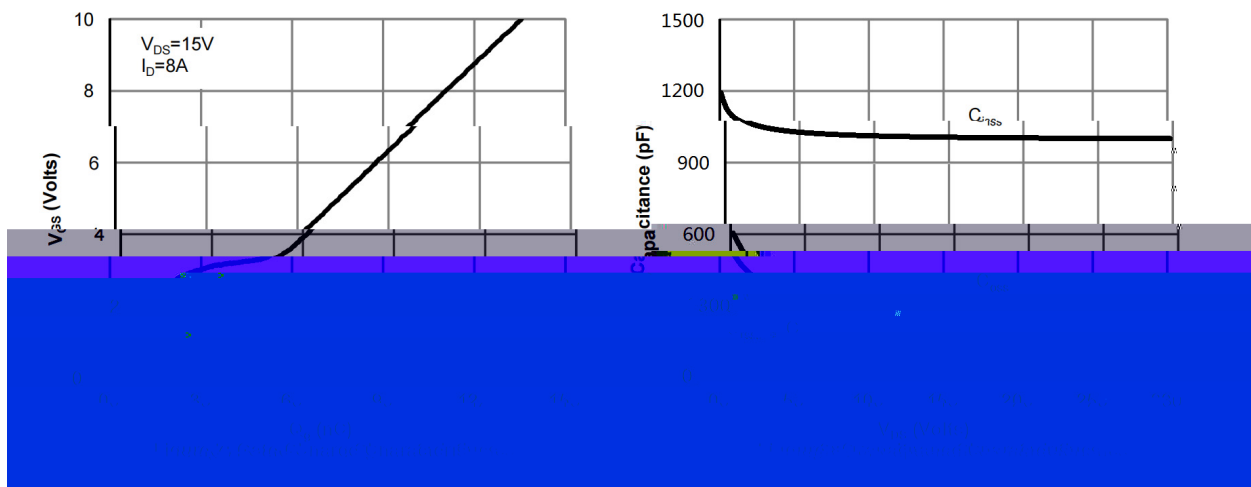
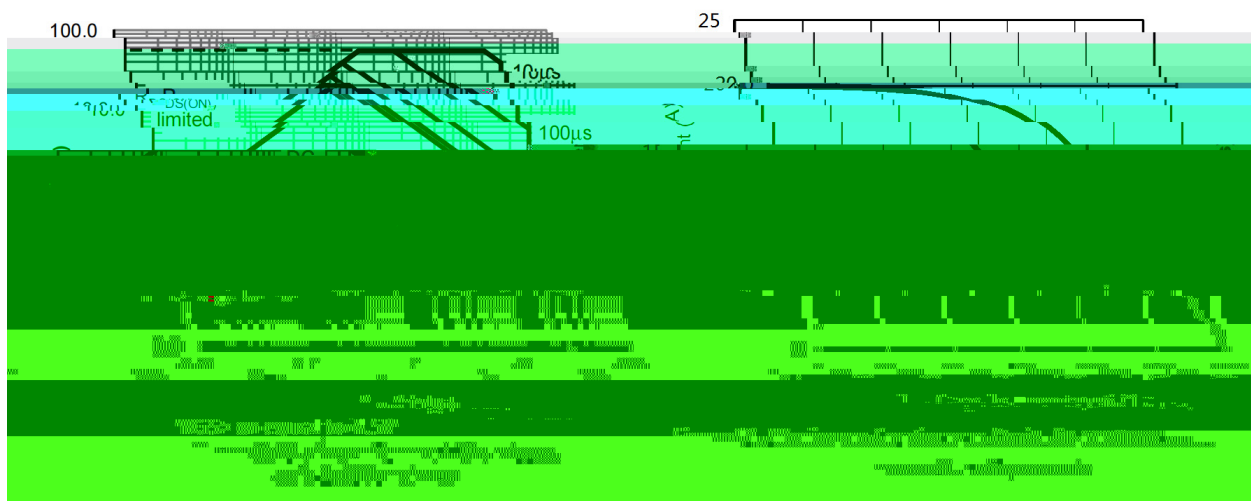
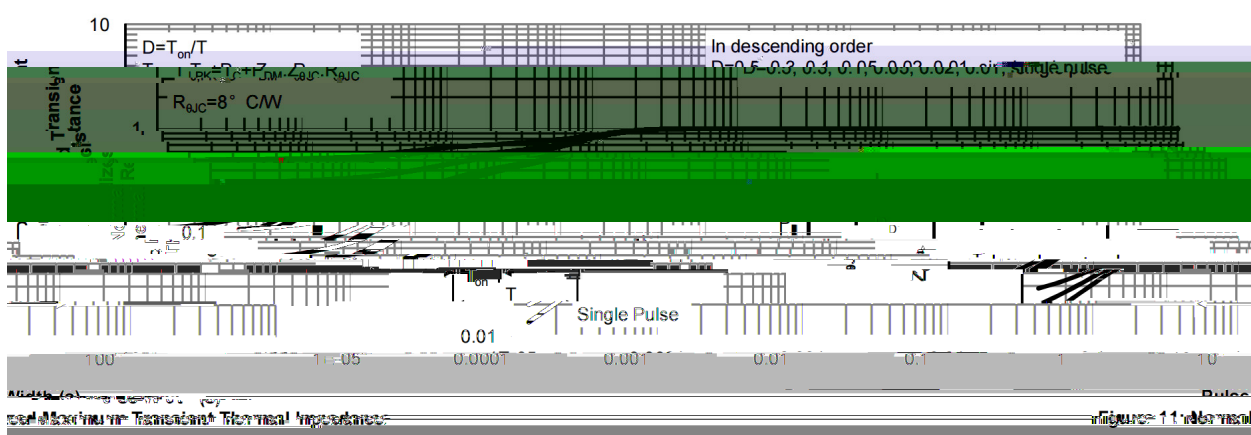


Figure 5: On-Resistance Characteristic

Figure 6: Power Dissipation Characteristic

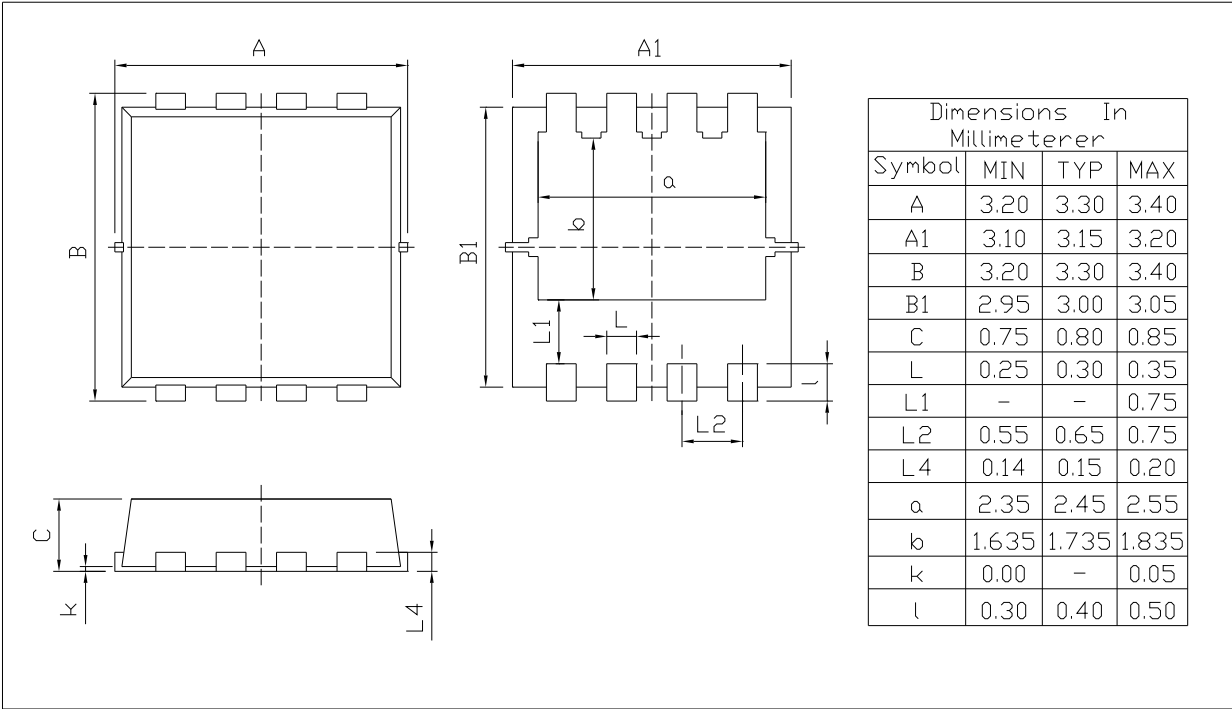
/ Electrical Characteristic Curve



/ Package Dimensions

PDFN3X3A-8L

Unit:mm



Rev.00 202011

() / Temperature Profile for IR Reflow Soldering(Pb-Free)

- б ” Χ
- 1 ǀ 𐀀 𐀁 𐀂 150 𐀃 200 𐀄 𐀅 𐀆 𐀇 60 𐀈 120sec;

2 Š Ө 𐀁 𐀂 255 ° 5 𐀄 𐀅 𐀆 𐀇 𐀈 𐀉 𐀊 𐀋 5 ° 0.5sec;

3 𐀌 𐀍 𐀎 𐀏 𐀐 𐀑 𐀒 𐀓 2 𐀔 10 𐀕 /sec.

Note:

1.Preheating:150~200 𐀄 , Time:60~120sec.

2.Peak Temp.:255 ° 5 𐀄 , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 𐀕 /sec.

/ Resistance to Soldering Heat Test Conditions

605 ° 5 𐀄