

PDFN3×3A-8L P MOS

P-Channel Enhancement Mode Field Effect Transistor in a PDFN3×3A-8L Plastic Package.

$V_{DS} (V) = -30V$

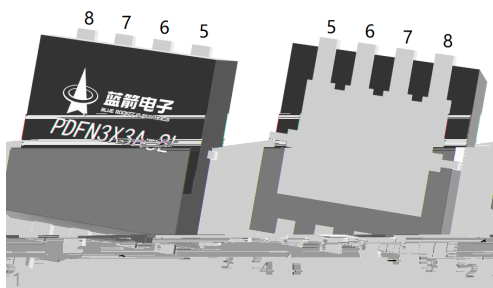
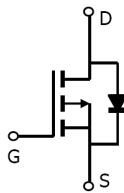
$I_D = -35 A (V_{GS} = \pm 20V)$

$R_{DS(ON)}@10V \leq 12mR (Typ. 10mR)$

HF Product.

DC/DC

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

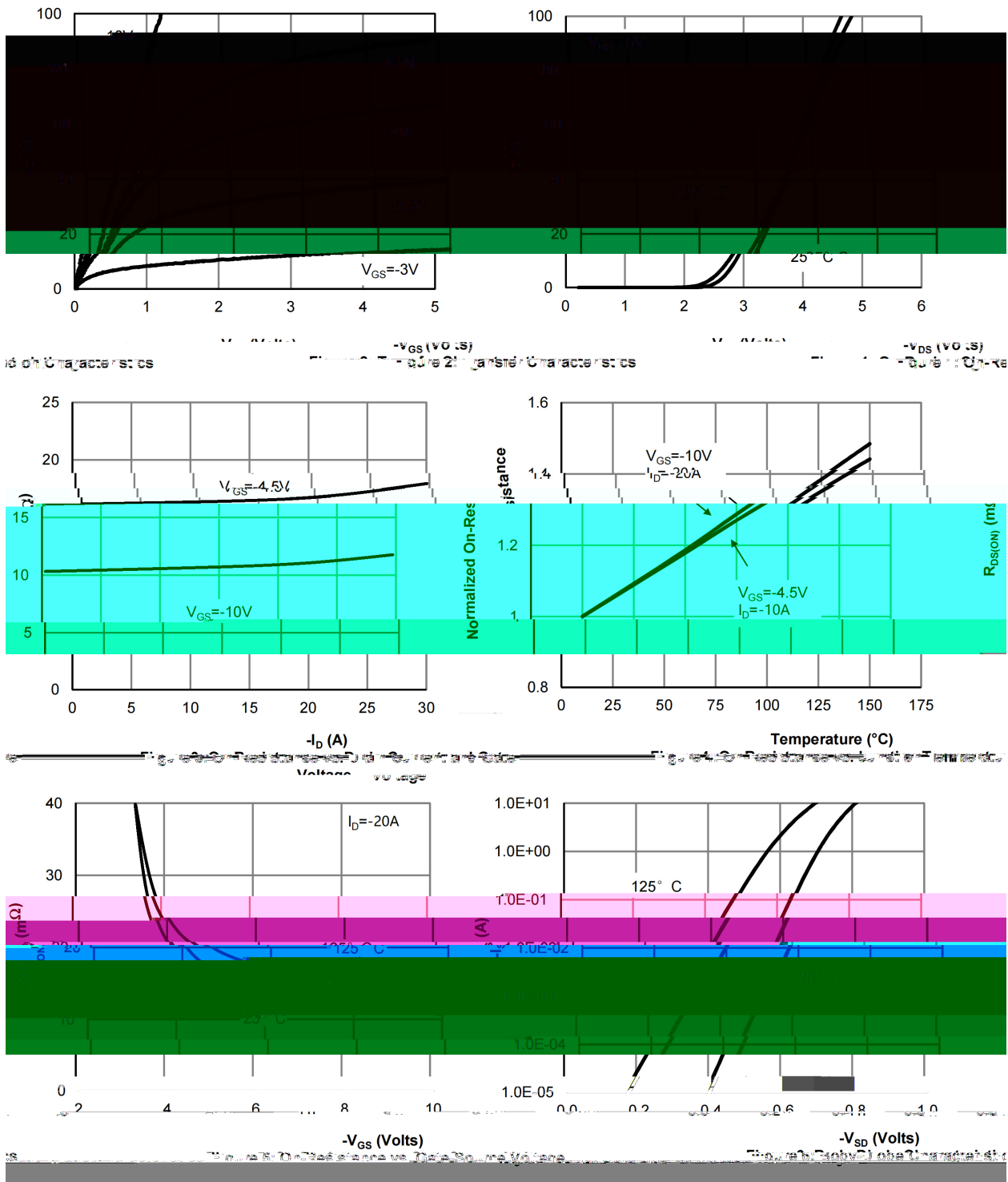


出脚	定义
Pin1	S
Pin2	S
Pin3	S
Pin4	G
Pin5	D
Pin6	D
Pin7	D
Pin8	D

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-30	V
Drain Current	$I_D(T_C=25^{\circ}\text{C})$	-35	A
Drain Current - Pulsed	I_{DM}	-80	A
Gate-Source Voltage	V_{GS}	± 20	V
Avalanche Current	I_{AS}	17	A
Single Pulsed Avalanche Energy	E_{AS}	151	mJ
Power Dissipation	$P_D(T_C=25^{\circ}\text{C})$	28	W
Operating and Storage Temperature Range	T		

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$I_D = -250\text{ A}$ $V_{GS} = 0V$	-30	-36		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -30V$ $V_{GS} = 0V$			-1	A
Gate-Body leakage current	I_{GSS}	$V_{DS} = 0V$ $V_{GS} = \pm 20V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}$ $I_D = -250\text{ A}$	-1.0	-1.7	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS} = -10V$ $I_D = -20A$		10.5	12	m Ω
		$V_{GS} = -4.5V$ $I_D = -10A$		16.5	18	
Diode Forward Voltage	V_{SD}	$I_S = -1A$ $V_{GS} = 0V$			-1.2	V
Gate resistance	R_g	$V_{GS} = 0V$ $V_{DS} = 0V$ $f = 1MHz$		7.5	10	Ω
Input Capacitance	C_{iss}	$V_{GS} = 0V$ $V_{DS} = -25V$ $f = 1MHz$		2100		pF
Output Capacitance	C_{oss}			340		
Reverse Transfer Capacitance	C_{rss}			210		
Total Gate Charge	$Q_g(10V)$	$V_{GS} = -10V$ $V_{DS} = -15V$ $I_D = -17A$		35		nC
Total Gate Charge	$Q_g(4.5V)$			17		
Gate-Source Charge	Q_{gs}			5.7		
Gate-Drain Charge	Q_{gd}			8.8		
Turn-on Delay Time	$t_{d(ON)}$	$V_{GS} = -10V$ $V_{DS} = -15V$ $R_L = 0.9$ $R_{GEN} = 3$		11		ns
Turn-on Rise Time	t_r			7.5		
Turn-off Delay Time	$t_{d(OFF)}$			43.5		
Turn-off Fall Time	t_f			17.5		



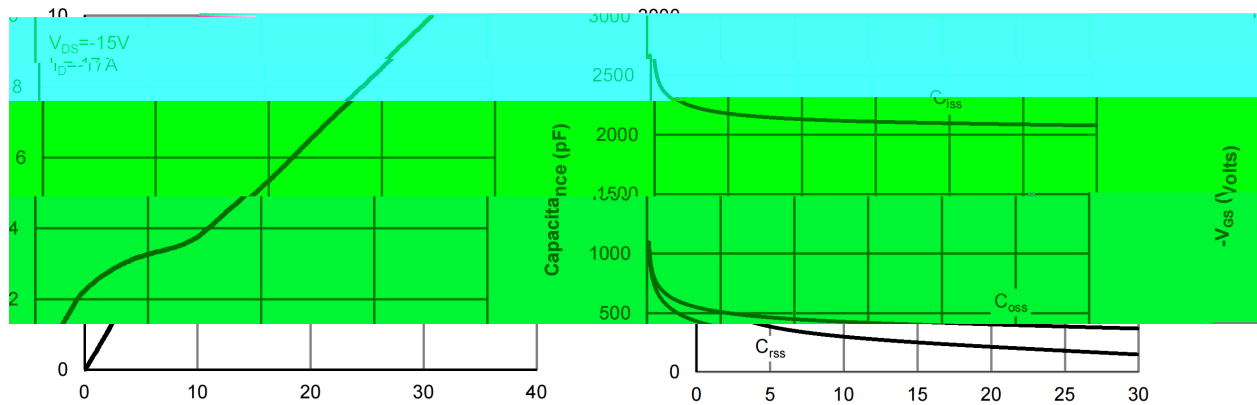


Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics

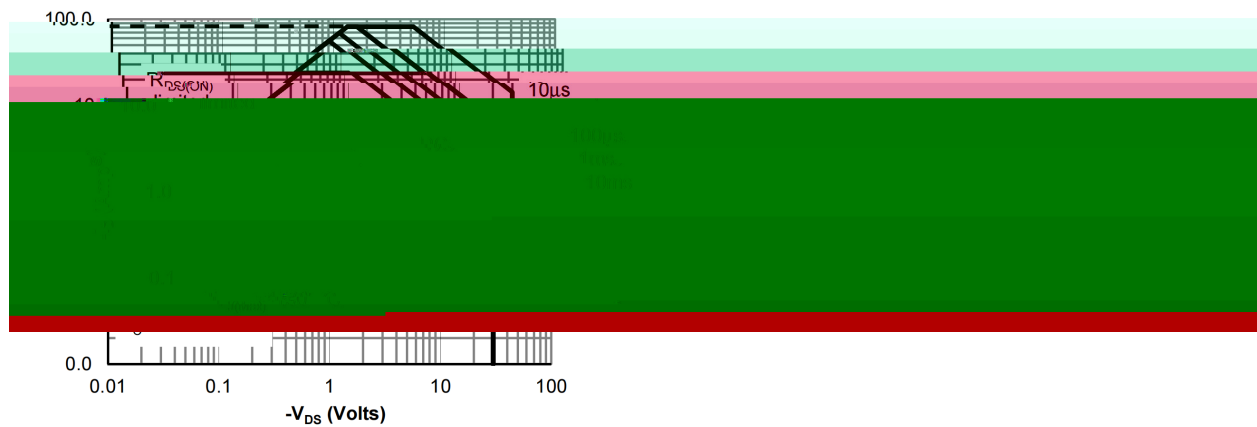


Figure 9: Maximum Forward Biased Safe Operating Area

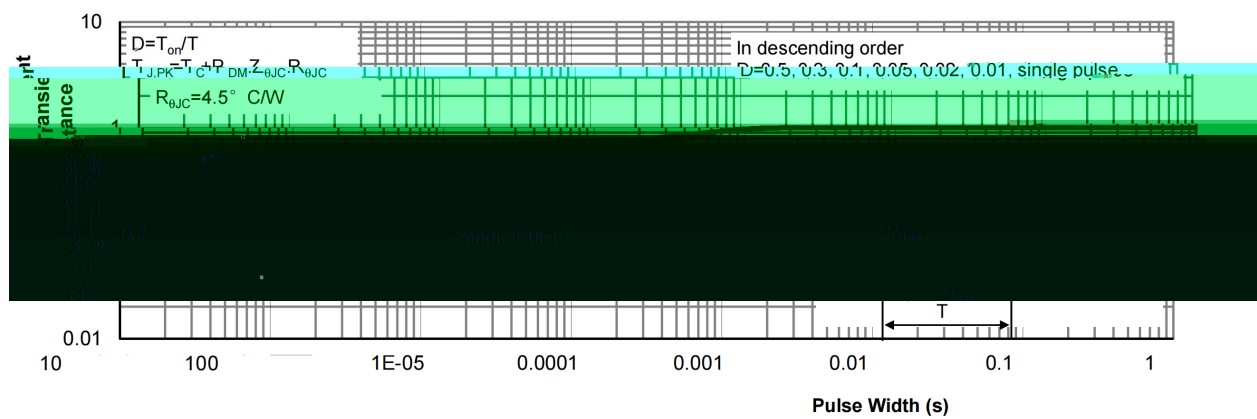
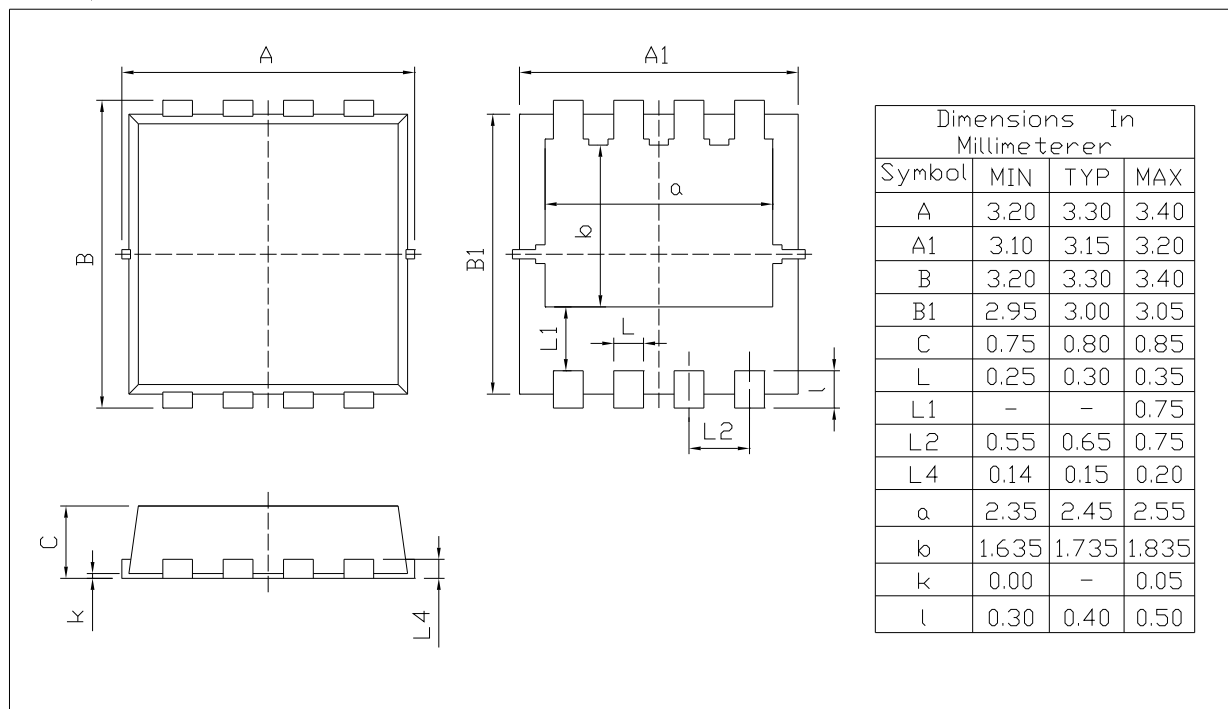


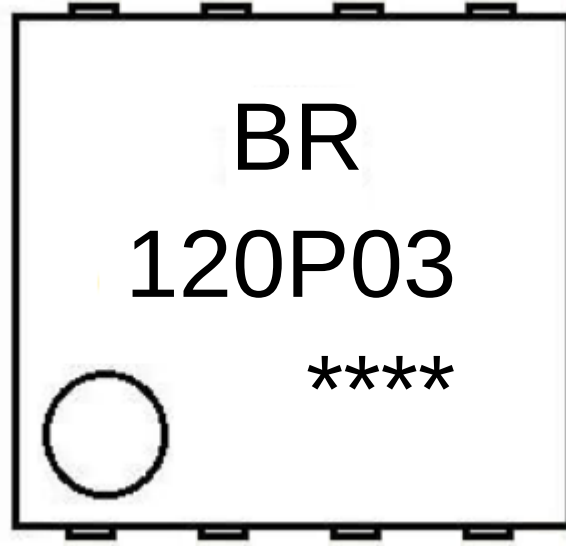
Figure 10: Normalized Maximum Transient Thermal Impedance

PDFN3X3A-8L

Unit:mm



Rev.00 202011



BR

120P03

Note:

BR: Company Code

120P03: 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