

Rev.B Feb.-2025

PDFN3×3-8L P MOS

Double P-CHANNEL MOSFET in a PDFN3×3-8L Plastic Package.

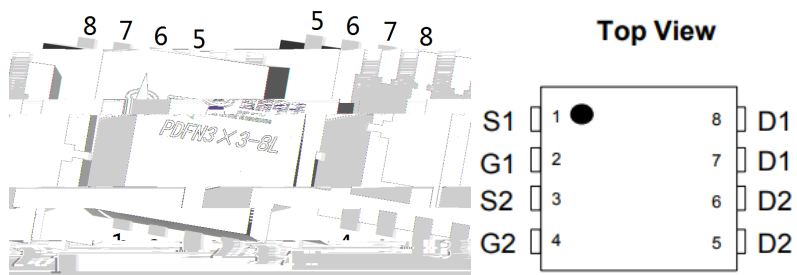
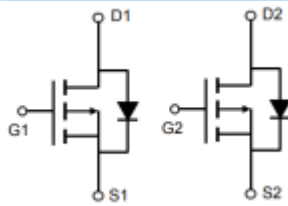
$V_{DS}(V)=-30V$ $I_D=-5.5A$

$R_{DS(ON)}<40m\Omega(V_{GS}=-10V)$

$R_{DS(ON)}<70m\Omega(V_{GS}=-4.5V)$

HF Product.

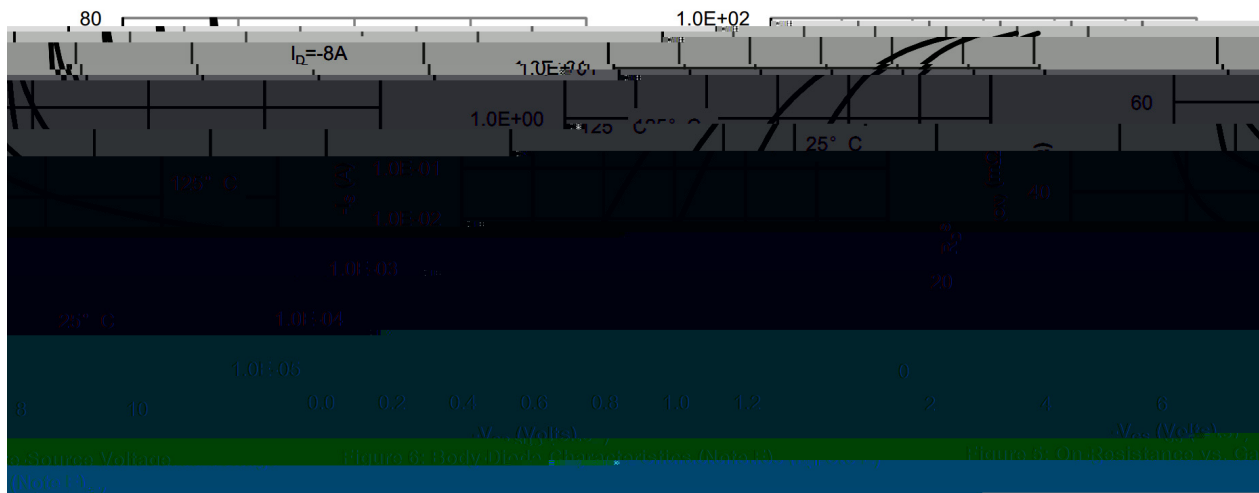
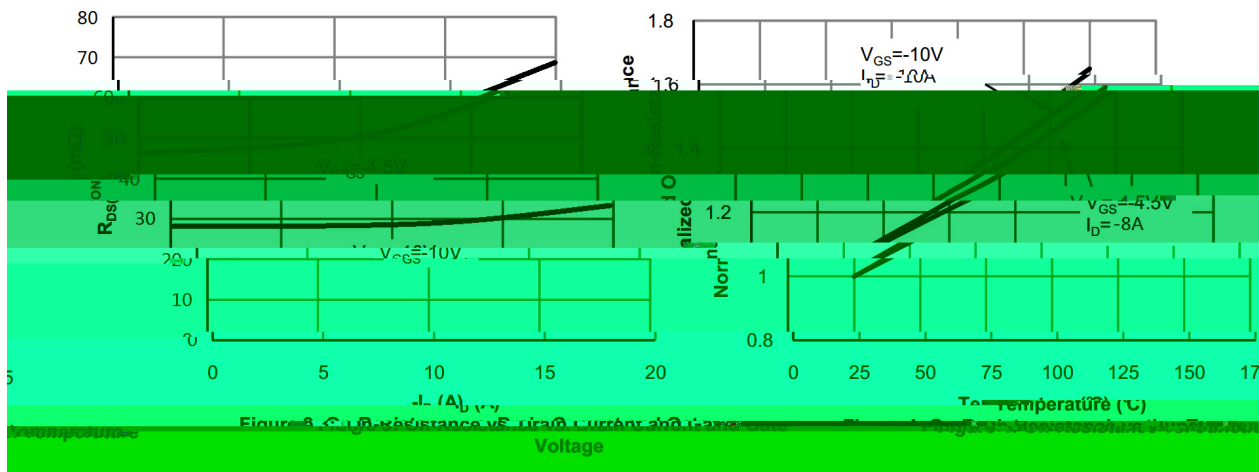
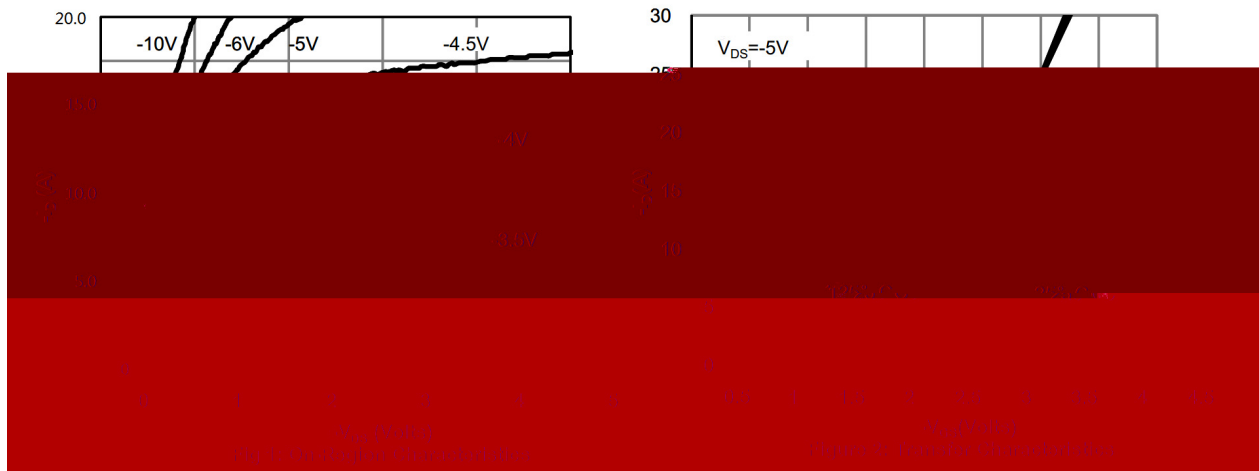
Intended for use in general purpose switching and phase control applications.

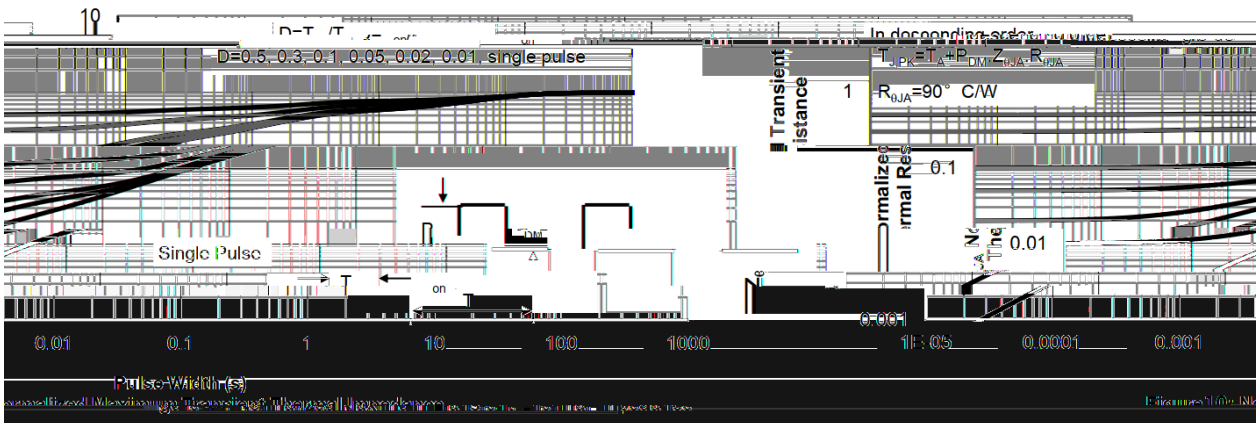
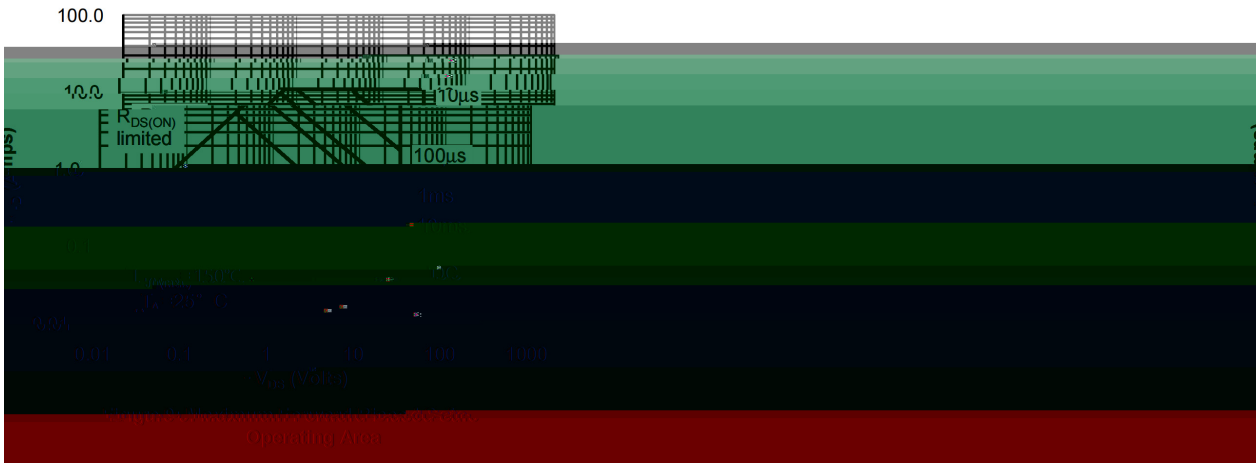
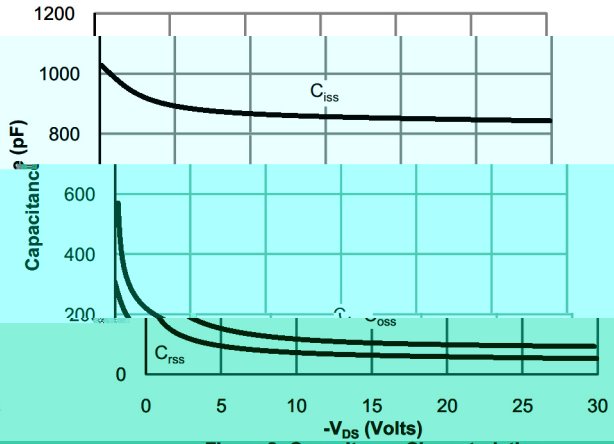
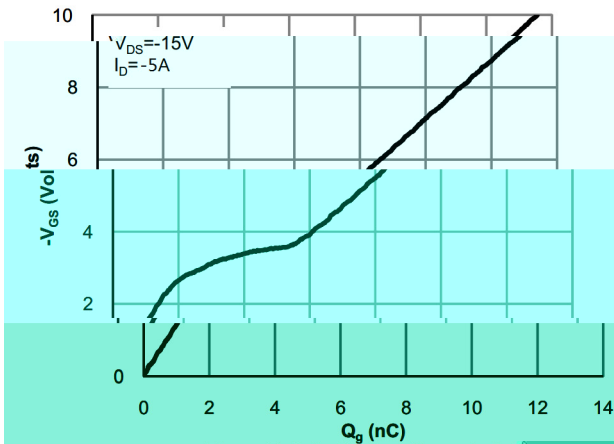


See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	-30	V
Gate-Source Voltage	V_{GSS}	± 20	V
Continuous Drain Current	$I_D (T_A=25^\circ\text{C})$	-5.5	A
Pulsed Drain Current	I_{DM}	-11	A
Power Dissipation	$P_D (T_A=25^\circ\text{C})$	2	W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	
Maximum Junction-to-Ambient	$R_{\theta JA}(t \leq 10s)$	62.5	/W
Maximum Junction-to-Ambient	$R_{\theta JA}(\text{Steady-State})$	90	/W

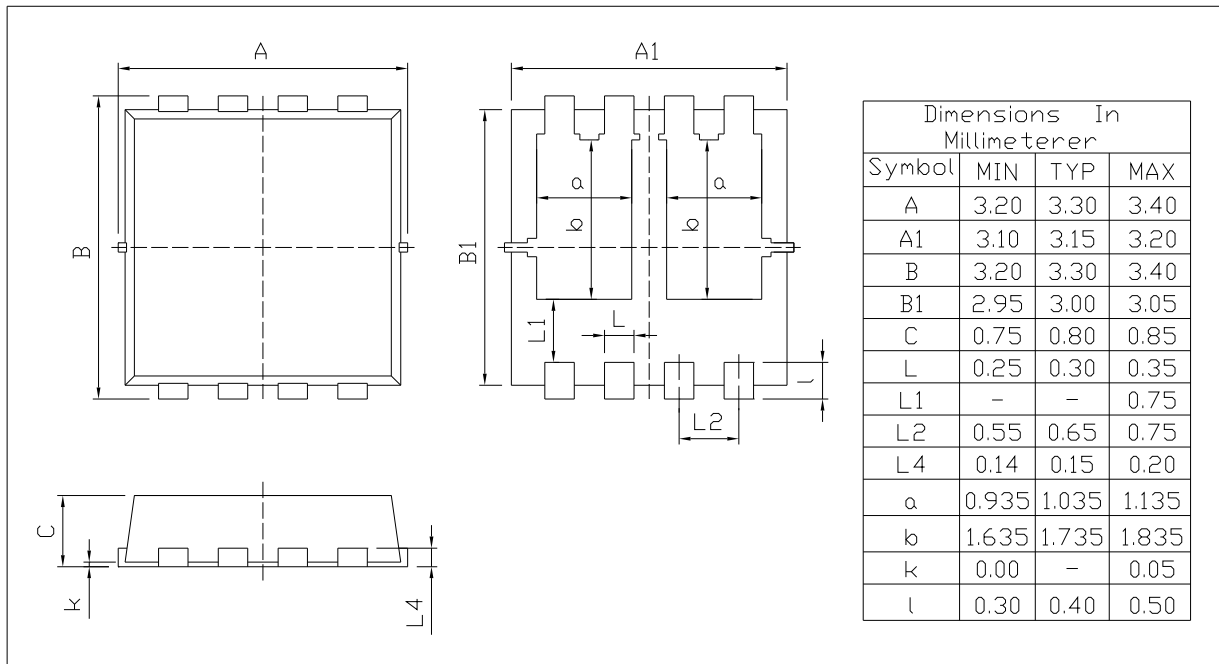
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$I_D = -250\mu\text{A}$ $V_{GS} = 0V$	-30			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = -30V$ $V_{GS} = 0V$			-1.0	μA
Gate-Body leakage current	I_{GSS}	$V_{DS} = 0V$ $V_{GS} = \pm 20V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}$ $I_D = -250\mu\text{A}$	-1.0	-1.5	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS} = -10V$ $I_D = -10A$		28.5	30	m Ω
		$V_{GS} = -4.5V$ $I_D = -8A$		40	55	
Diode Forward Voltage	V_{SD}	$I_S = -1A$ $V_{GS} = 0V$			-1.2	V
Gate Resistance	R_g	$V_{GS} = 0V$ $V_{DS} = 0V$ $f = 1\text{MHz}$		7		Ω
Input Capacitance	C_{iss}	$V_{GS} = 0V$ $V_{DS} = -15V$ $f = 1\text{MHz}$		850		pF
Output Capacitance	C_{oss}			100		
Reverse Transfer Capacitance	C_{rss}			65		
Total Gate Charge	$Q_{g(10V)}$	$V_{GS} = -10V$ $V_{DS} = -15V$ $I_D = -5A$		14.2		nC
Total Gate Charge	$Q_{g(4.5V)}$			7.4		
Gate-Source Charge	Q_{gs}			3.3		
Gate-Drain Charge	Q_{gd}			3.8		
Turn-on Delay Time	$t_{d(ON)}$	$V_{GS} = -10V$ $V_{DS} = -15V$ $R_L = 1.8\Omega$ $R_{GEN} = 3\Omega$		8.3		ns
Turn-on Rise Time	t_r			6.5		
Turn-off Delay Time	$t_{d(OFF)}$			22		
Turn-off Fall Time	t_f			5.5		



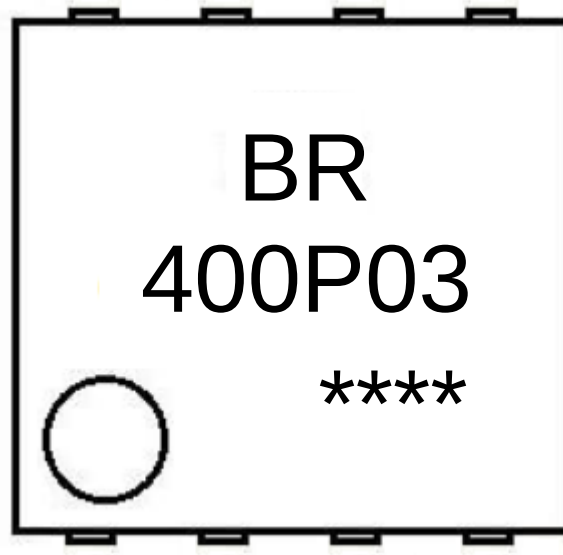


PDFN3X3-8L

Unit:mm



Rev.00 202011



BR

400P03

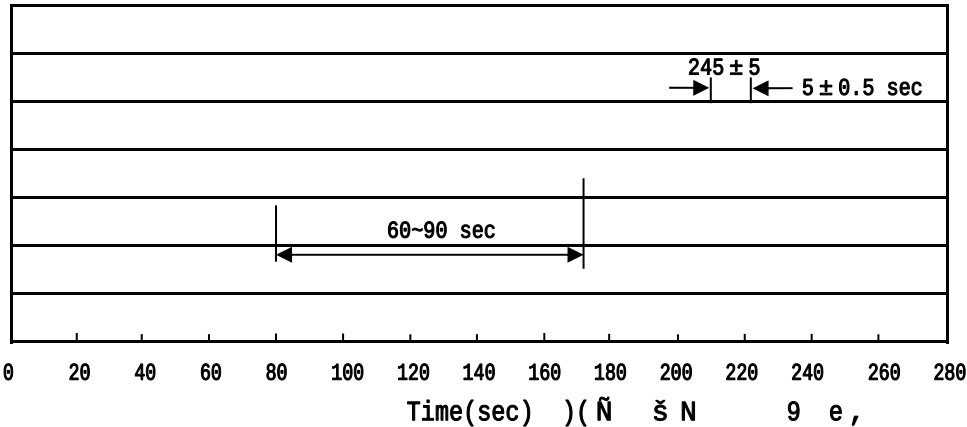
Note:

BR: Company Code

400P03: 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.

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm ³)		
PDFN3×3-8L	5,000	2	10,000	6	60,000	13 ×12	360×360×50	380×335×366