

/ Descriptions

PDFN3×3-8L P MOS

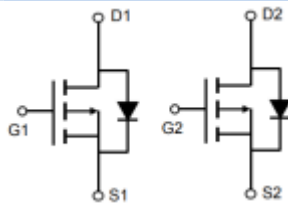
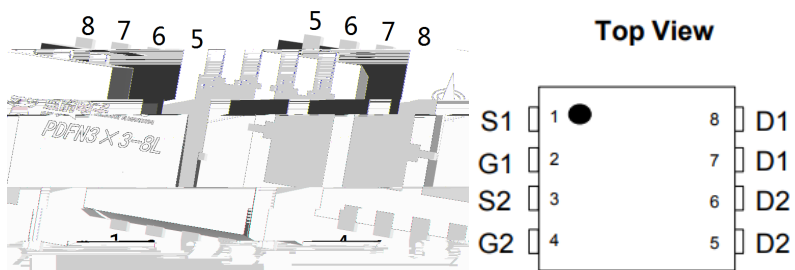
Double P-CHANNEL MOSFET in a PDFN3×3-8L Plastic Package.

/ Features $V_{DS}(V)=-30V$ $I_D=-5.5A$ $R_{DS(ON)}<40m$ ($V_{GS}=-10V$) $R_{DS(ON)}<70m$ ($V_{GS}=-4.5V$)

HF Product.

/ Applications

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

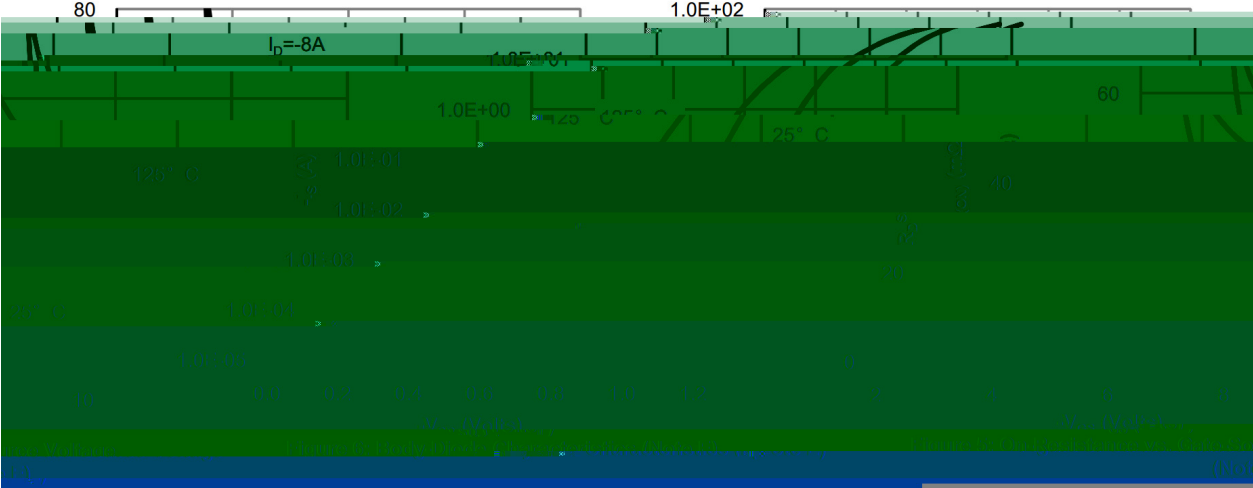
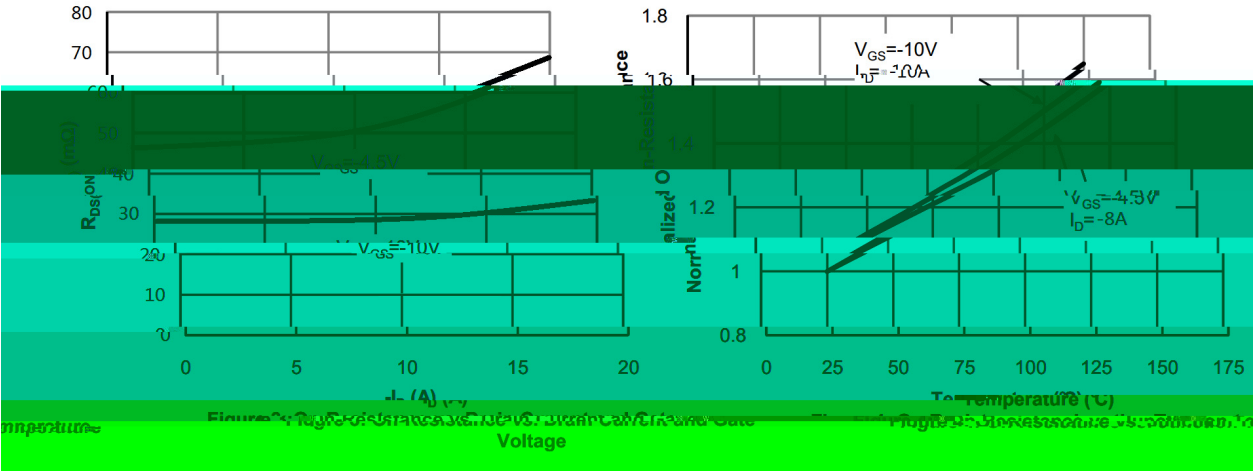
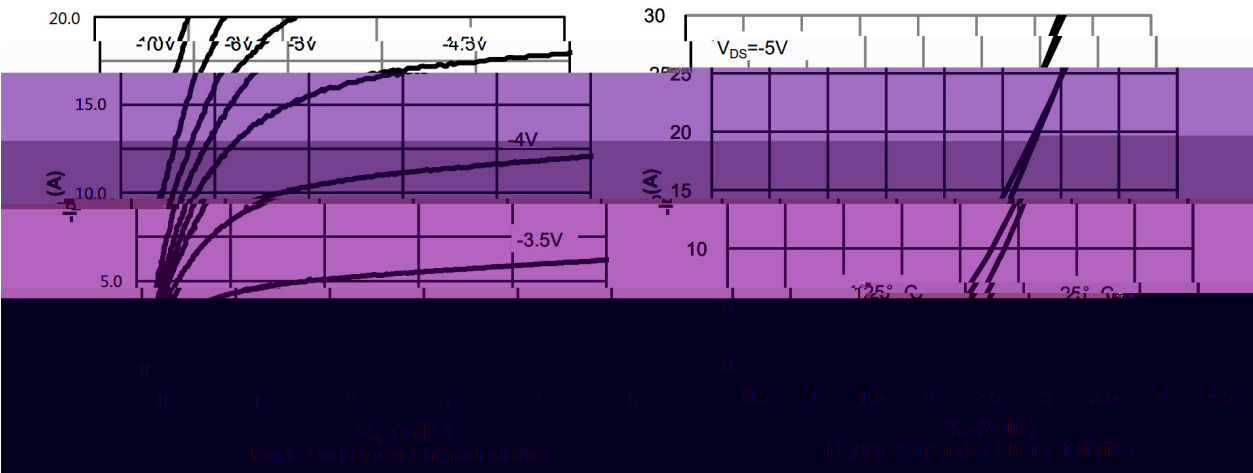
/ Equivalent Circuit**/ Pinning****/ Marking**

See Marking Instructions.

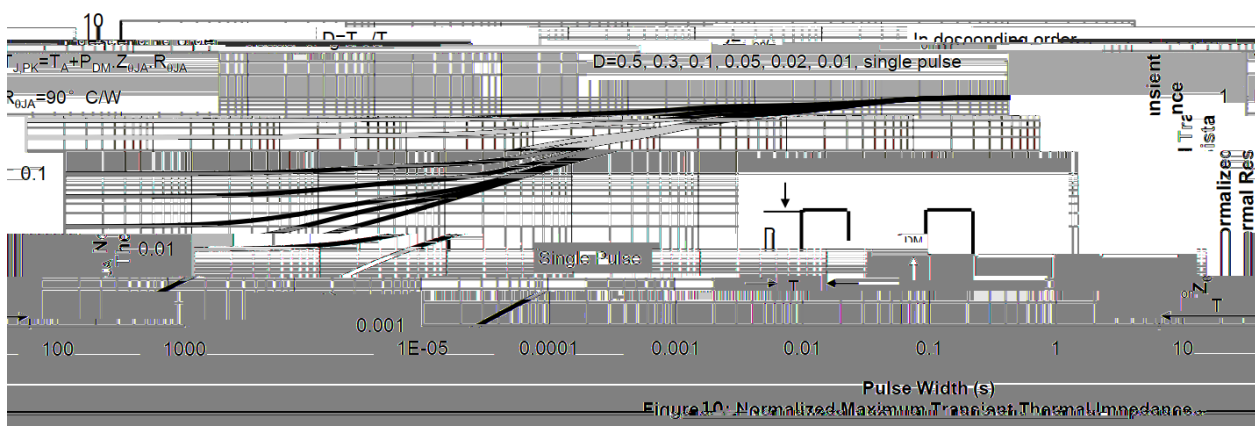
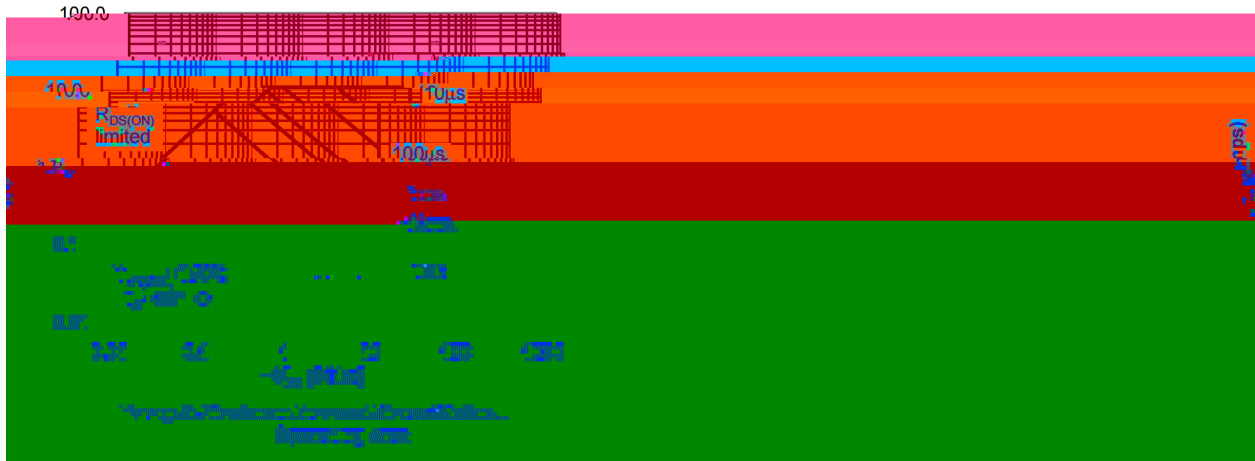
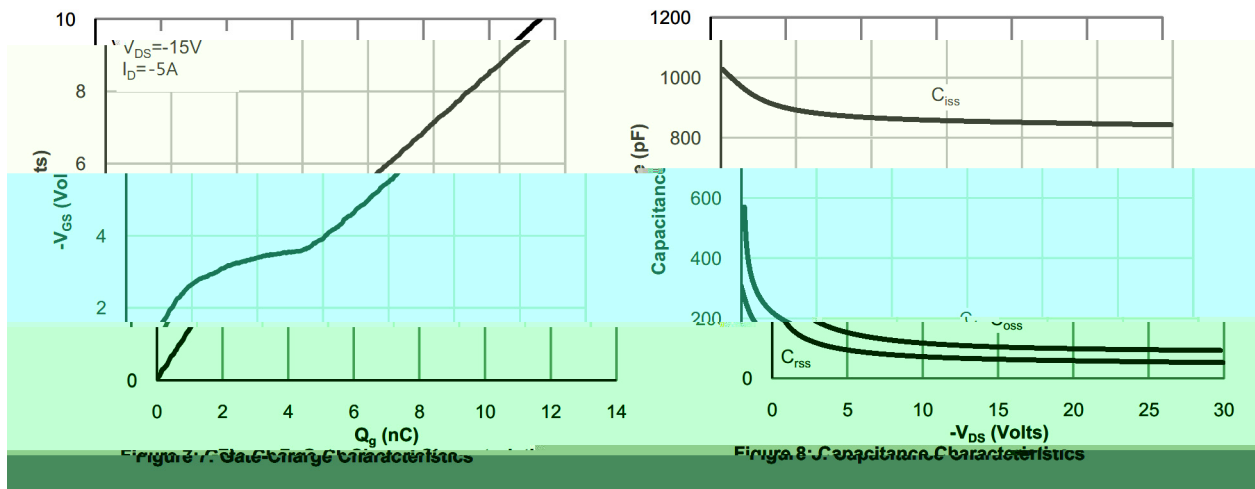
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	-30	V
Gate-Source Voltage	V_{GSS}	± 20	V
Continuous Drain Current	$I_D (T_A=25^\circ\text{C})$	-5.5	A
Pulsed Drain Current	I_{DM}	-11	A
Power Dissipation	$P_D (T_A=25^\circ\text{C})$	2	W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	
Maximum Junction-to-Ambient	$R_{\theta JA}(t_{10s})$	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}	$I_D=-250\text{ A}$ $V_{GS}=0V$	-30			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-30V$ $V_{GS}=0V$			-1.0	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	-1.5	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	$V_{GS}=-10V$ $I_D=-10A$		28.5	30	m
		$V_{GS}=-4.5V$ $I_D=-8A$		40	55	
Diode Forward Voltage	V_{SD}	$I_S=-1A$ $V_{GS}=0V$			-1.2	V
Gate Resistance	R_g	$V_{GS}=0V$ $V_{DS}=0V$ $f=1MHz$		7		
Input Capacitance	C_{iss}	$V_{GS}=0V$ $V_{DS}=-15V$ $f=1MHz$		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	$t_{d(ON)}$	$V_{GS}=-10V$ $V_{DS}=-15V$ $R_L=1.8$ $R_{GEN}=3$		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		

Electrical Characteristic Curve



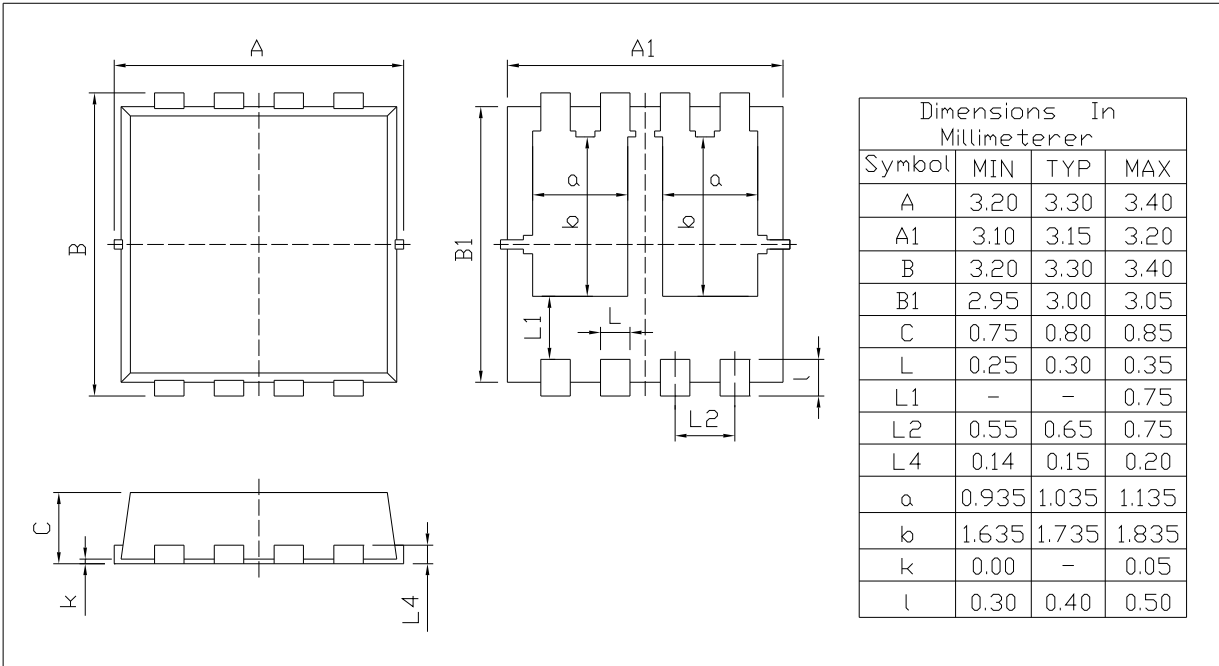
/ Electrical Characteristic Curve



/ Package Dimensions

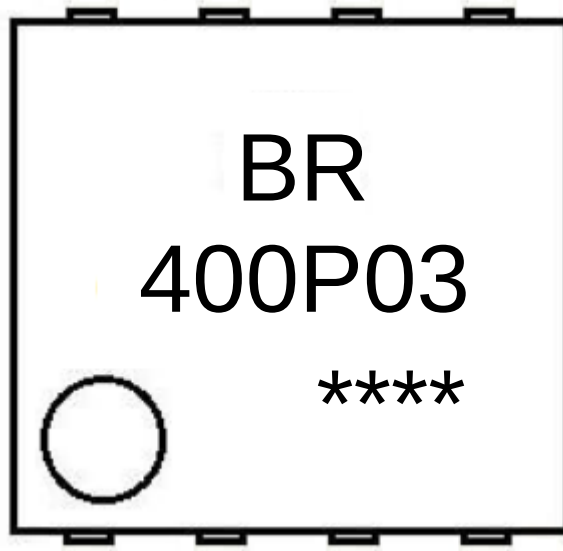
PDFN3X3-8L

Unit:mm



Rev.00 202011

/ Marking Instructions



BR

400P03

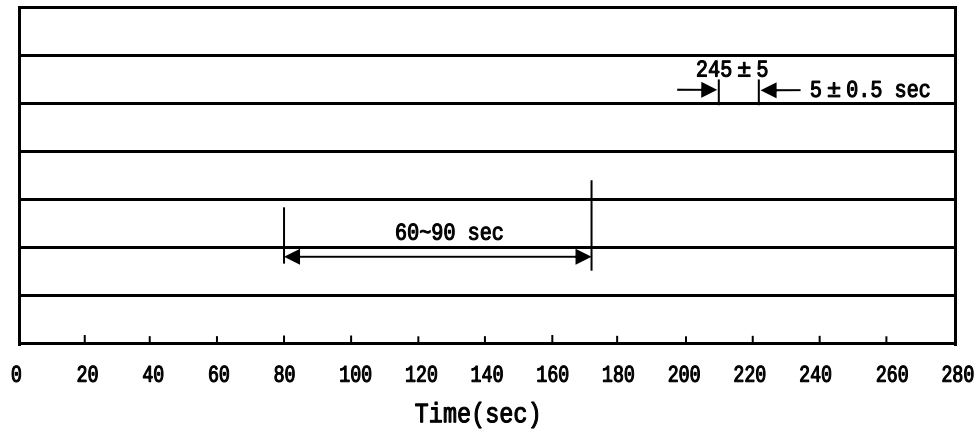
Note:

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. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ 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

/ Notices