/ 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)

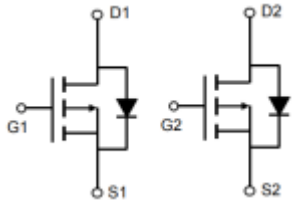
$R_{DS(ON)}$<70m (V_{GS}=-4.5V)

HF Product.

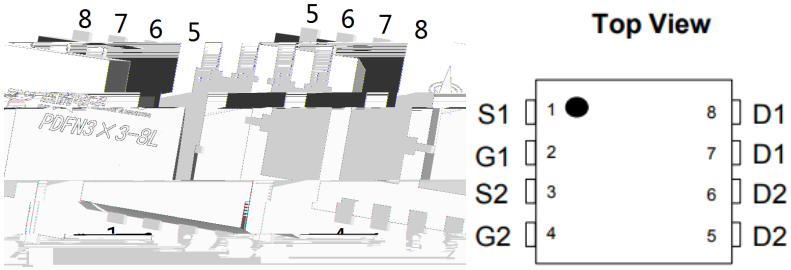
/ Applications

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

/ Equivalent Circuit



/ Pinning



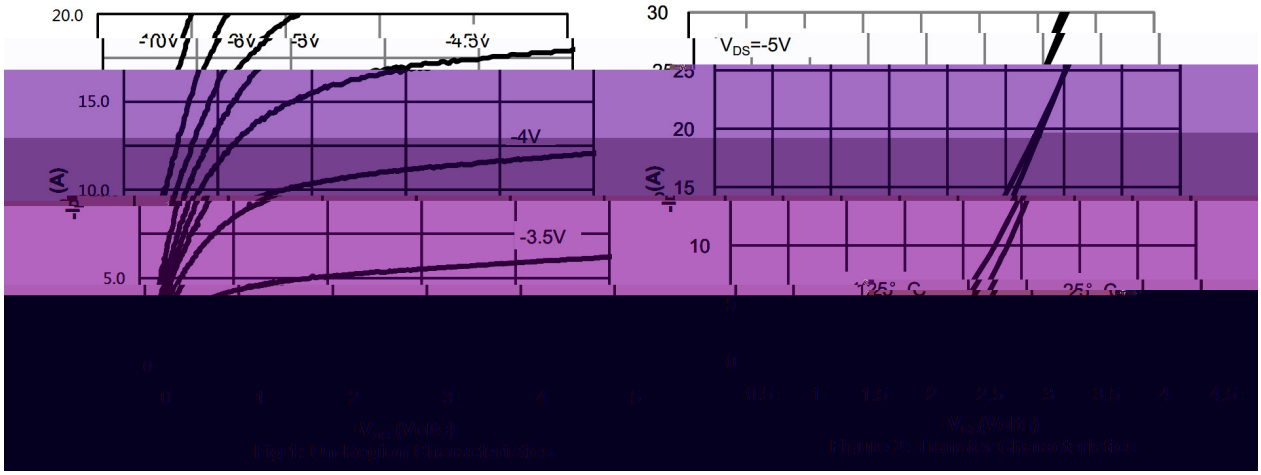
/ Marking

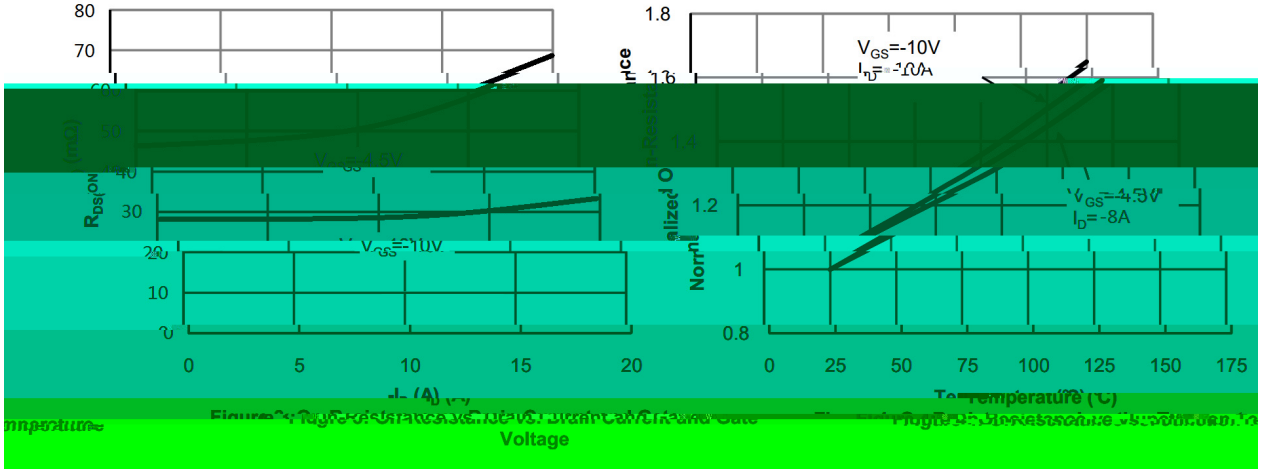
See Marking Instructions.

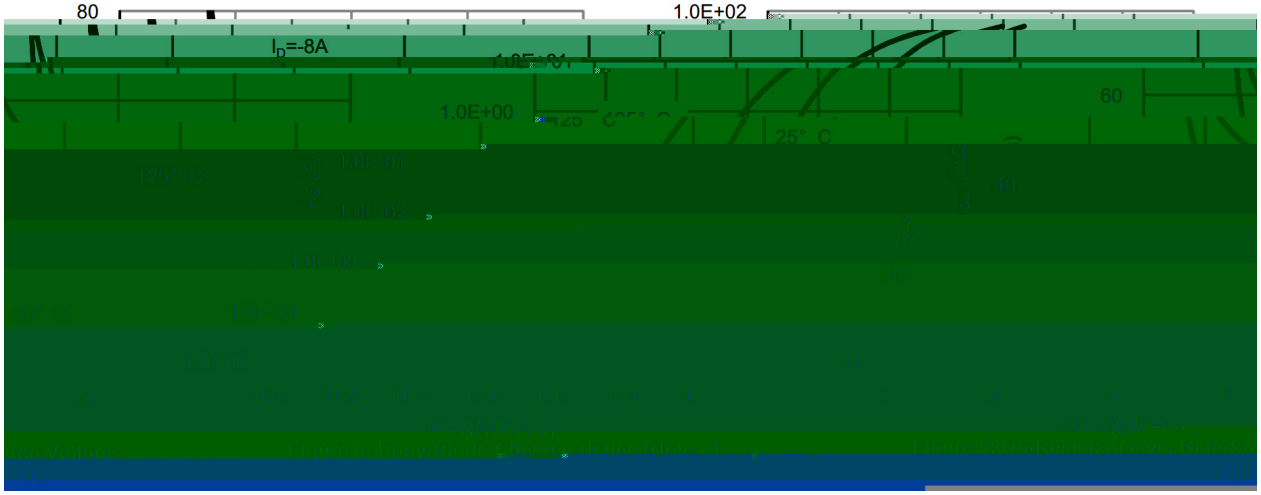
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	-30	V
Gate-Source Voltage	V_{GSS}	±20	V
Continuous Drain Current	I_D (T_A=25)	-5.5	A
Pulsed Drain Current	I_{DM}	-11	A
Power Dissipation	P_D (T_A=25)	2	W
Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150	
Maximum Junction-to-Ambient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

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-250 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}=±20V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=VGS	I_D=-250 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 f=1MHz	V_{DS}=0V		7		
Input Capacitance	C_{iss}	V_{GS}=0V f=1MHz	V_{DS}=-15V		850		pF
Output Capacitance	C_{oss}				100		
Reverse Transfer Capacitance	C_{rss}				65		
Total Gate Charge	$Q_{g(10V)}$	V_{GS}=-10V I_D=-5A	V_{DS}=-15V		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 R_L=1.8	V_{DS}=-15V 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

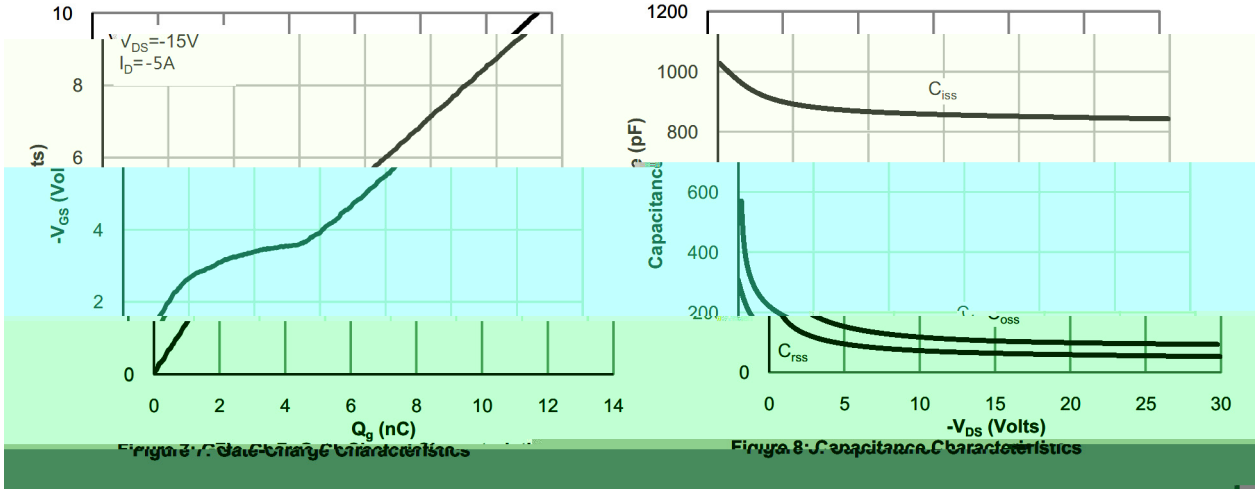
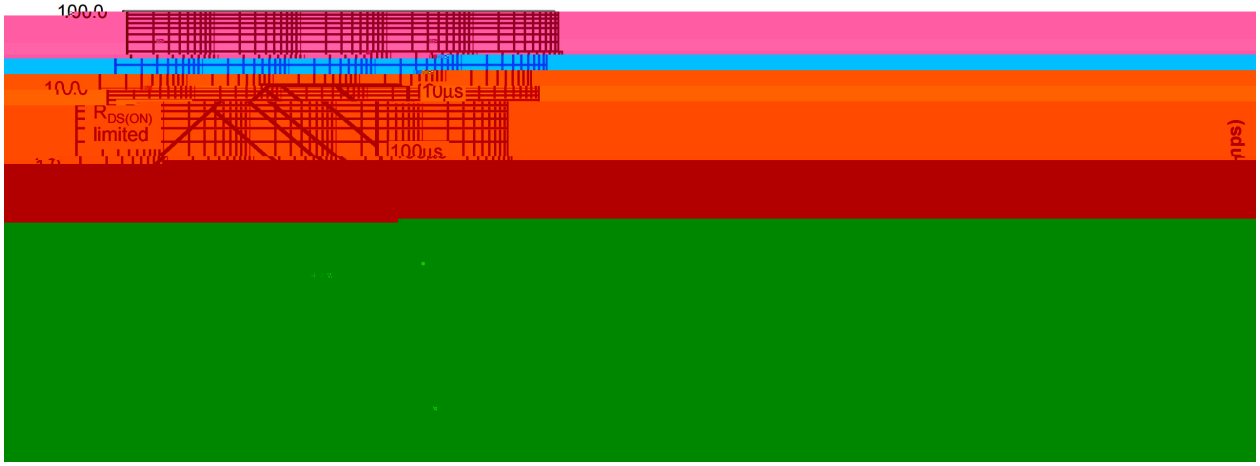


Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics



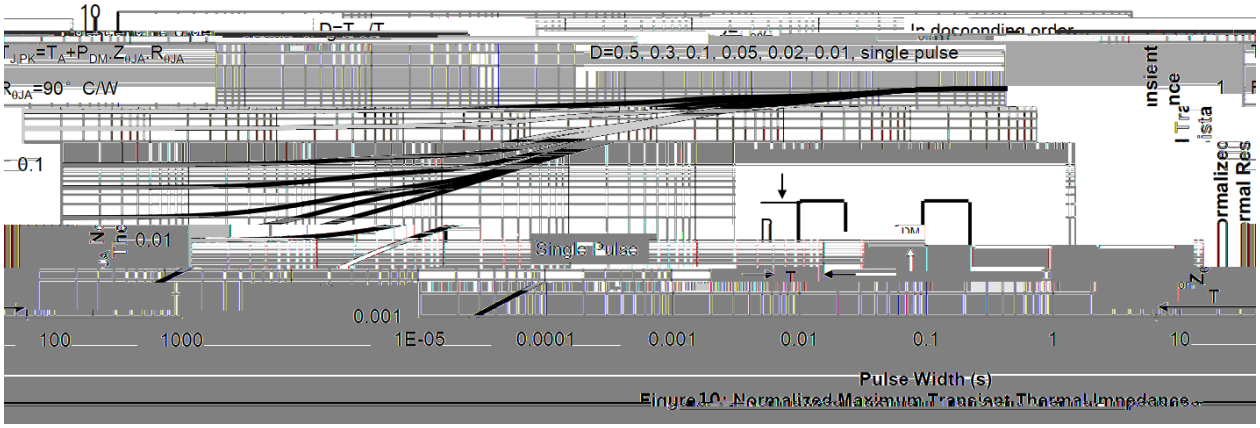
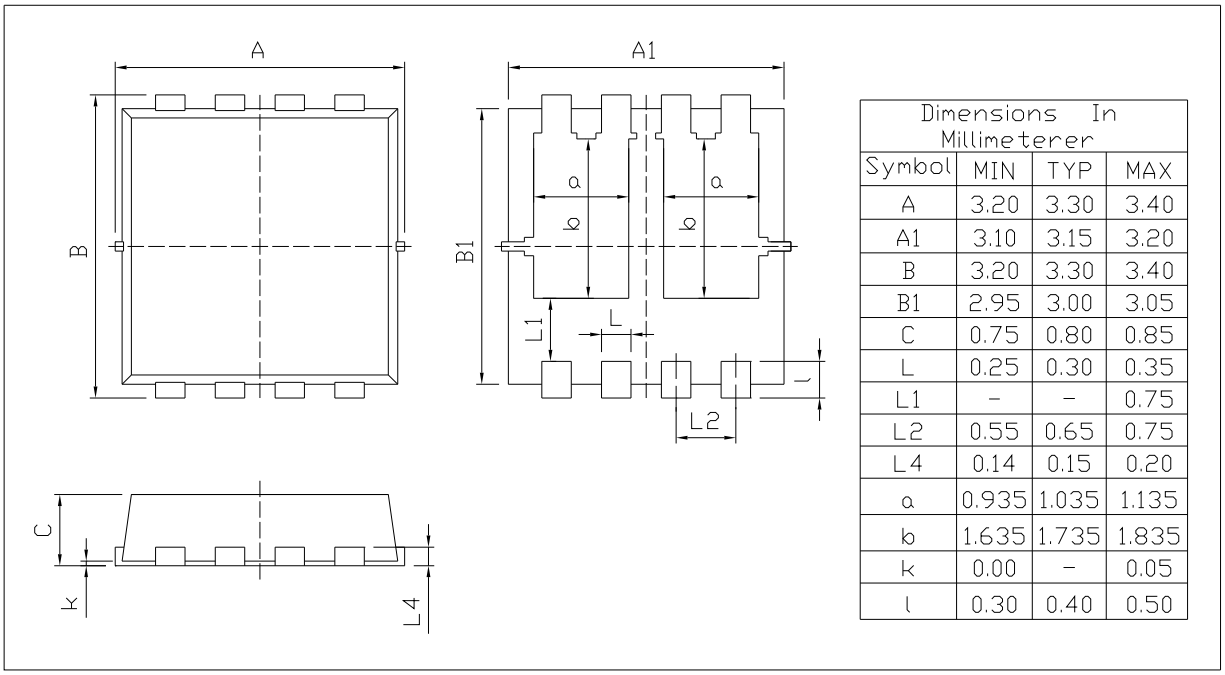


Figure 10: Normalized Maximum Transient Thermal Impedance

/ Package Dimensions

PDFN3X3-8L

Unit:mm



Dimensions In Millimeterer			
Symbol	MIN	TYP	MAX
A	3.20	3.30	3.40
A1	3.10	3.15	3.20
B	3.20	3.30	3.40
B1	2.95	3.00	3.05
C	0.75	0.80	0.85
L	0.25	0.30	0.35
L1	-	-	0.75
L2	0.55	0.65	0.75
L4	0.14	0.15	0.20
a	0.935	1.035	1.135
b	1.635	1.735	1.835
k	0.00	-	0.05
l	0.30	0.40	0.50

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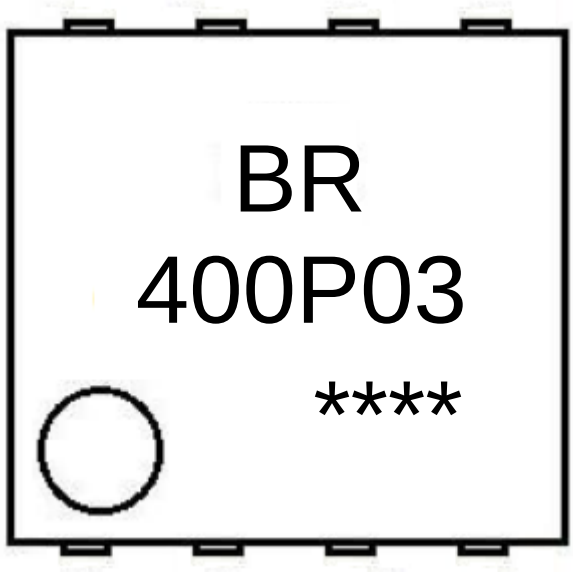
/ Marking Instructions



BR

400P03

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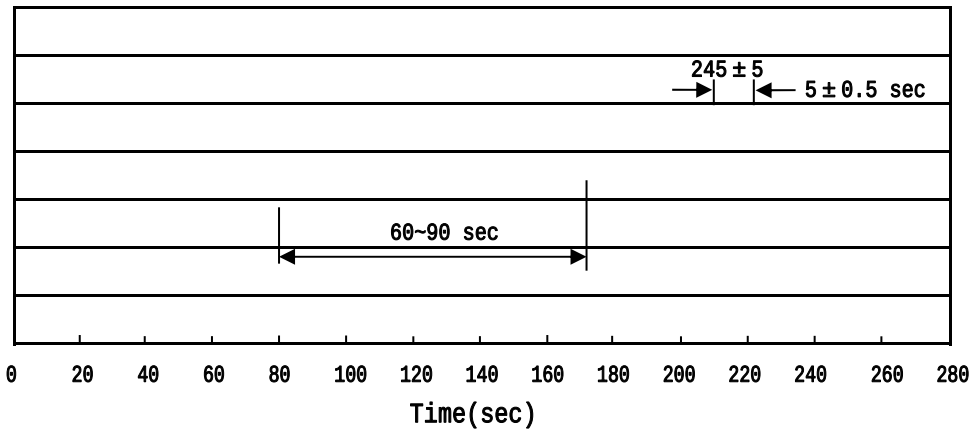
Note:

BR:	Company Code
400P03:	Product Type Code
****:	Lot No. Code, code change with Lot No

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



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