PDFN6×60;L

Complementary Enhancement MOSFET in a PDFN3×3-8L Plastic Package.

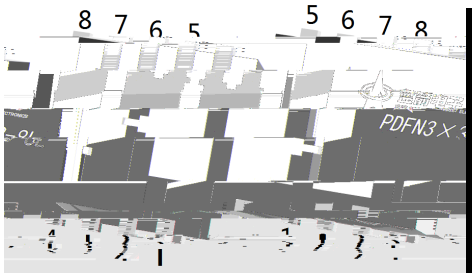
N0channel
V_{DS}(V)=30V I_D=37A
$R_{DS(ON)}$@10V<8mΩ(Typ.7.5mR)
$R_{DS(ON)}$@4.5V<15mΩ(Typ.11mR)

P-channel
V_{DS}(V)=-30V I_D=-26A
$R_{DS(ON)}$@-10V<13mΩ(Typ.12mR)
$R_{DS(ON)}$@-4.5V<20mΩ(Typ.17mR)

HF Product.

Battery protection switch,Mobile device battery charging and discharging,Load switch.

[redacted]



[redacted]

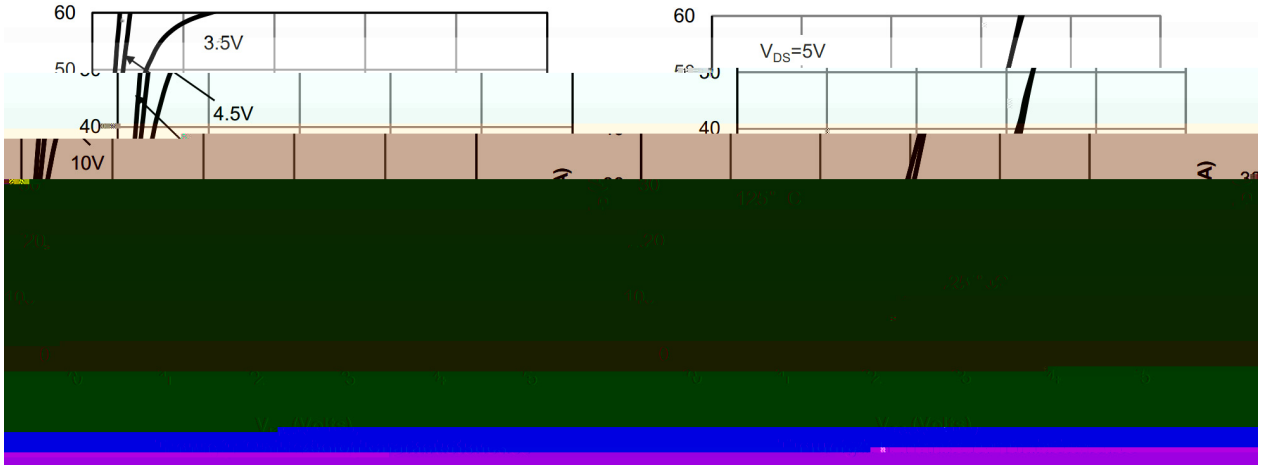
/ Marking

Parameter	Symbol	Rating		Unit
		N-channe	P-channell	
in-Source Voltage	V_{DSS}	30	-30	V
te-Source Voltage	V_{GSS}	±20		V
ntinuous Drain Current	$_D(T_c=25$)	37	-26	A
sed Drain Current	I_{DM}	82	-58	A
wer Dissipation	$_D(T_c=25$)	18	15	W
Junction and Storage Temperature Range	) =6 refBT10.4958 0 .0033 Tw5107 Tj10.5 27Tj1 4Jc(c)Tj10.4958 0 0 10.4471. =6 refBT T			

N- /N-CHANNEL Electrical Characteristics(Ta=25)

Parameter	N Symbol	; Test Conditions		Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V	I_D=250μA	30	35.5		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=30V	V_{GS}=0V			1.0	μA
Gate-Body leakage current	I_{GSS}	V_{GS}=±20V	V_{DS}=0V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}	I_D=250μA	1.0	1.8	2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V	I_D=10A		7.5	8	mΩ
		V_{GS}=4.5V	I_D=10A		11	15	mΩ
Diode Forward Voltage	V_{SD}	V_{GS}=0V	I_S=1.0A			1.4	V
Input Capacitance	C_{iss}	V_{DS}=25V f=1.0MHz	V_{GS}=0V		1170		pF
Output Capacitance	C_{oss}				110		pF
Reverse Transfer Capacitance	C_{rss}				100		pF
Gate resistance	Rg	V_{DS}=0V f=1.0MHz	V_{GS}=0V		3.7		Ω
Total Gate Charge	$Q_{g(10V)}$	V_{GS}=10V I_D=10A	V_{DS}=15V		40		nC
Total Gate Charge	$Q_{g(4.5V)}$				22		nC
Gate-Source Charge	Q_{gs}				11		nC
Gate-Drain Charge	Q_{gd}				5		nC
Turn-On Delay Time	$t_{d(on)}$	V_{DS}=15 V R_L=0.75Ω	V_{GS}=10V R_{GEN}=3Ω		11		ns
Turn-On Rise Time	t_r				14		ns
Turn-Off Delay Time	$t_{d(off)}$				38		ns
Turn-Off Fall Time	t_f				10		ns

N- / N-CHANNEL Electrical Characteristic Curve



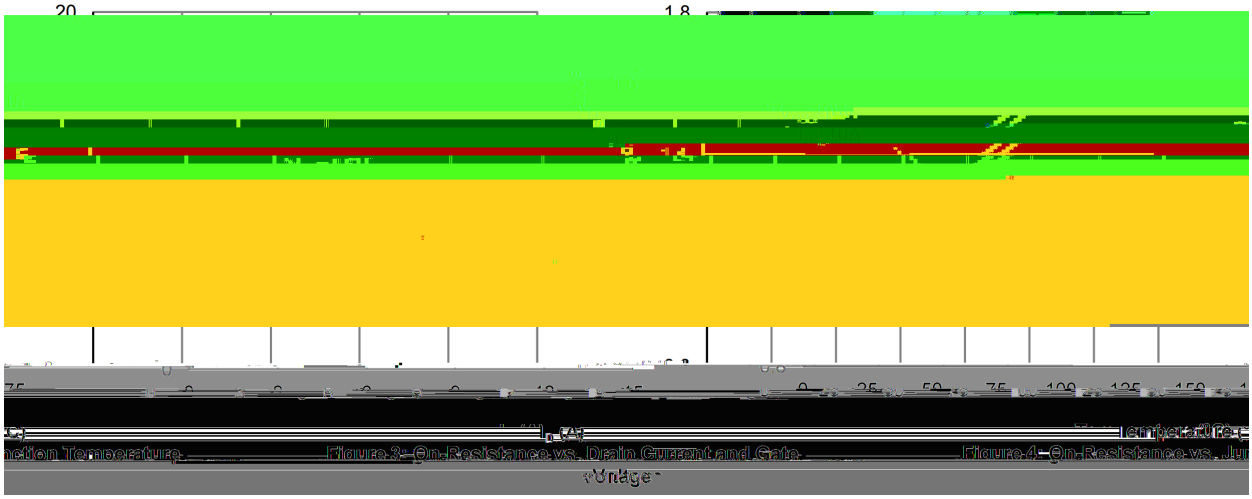
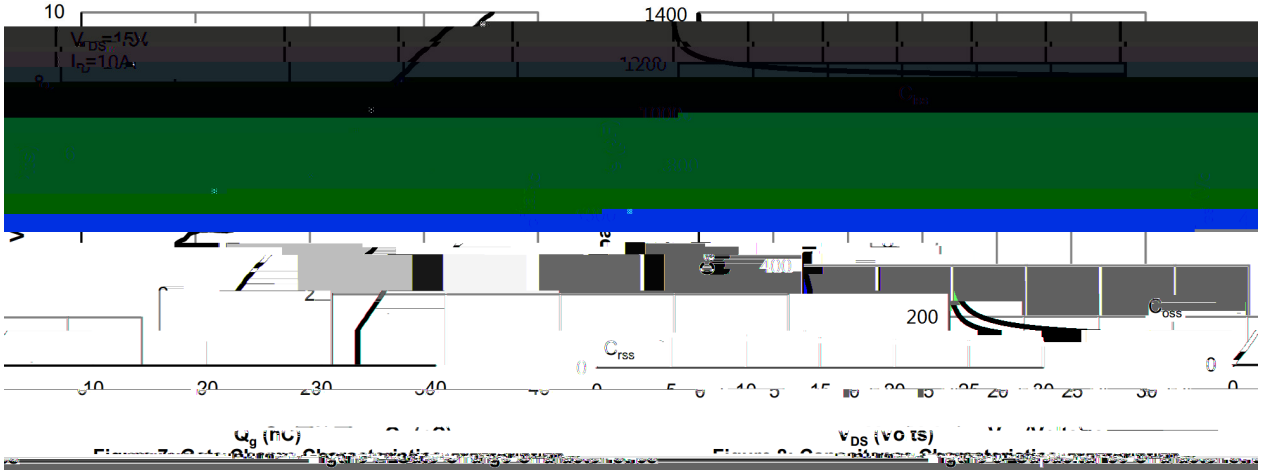
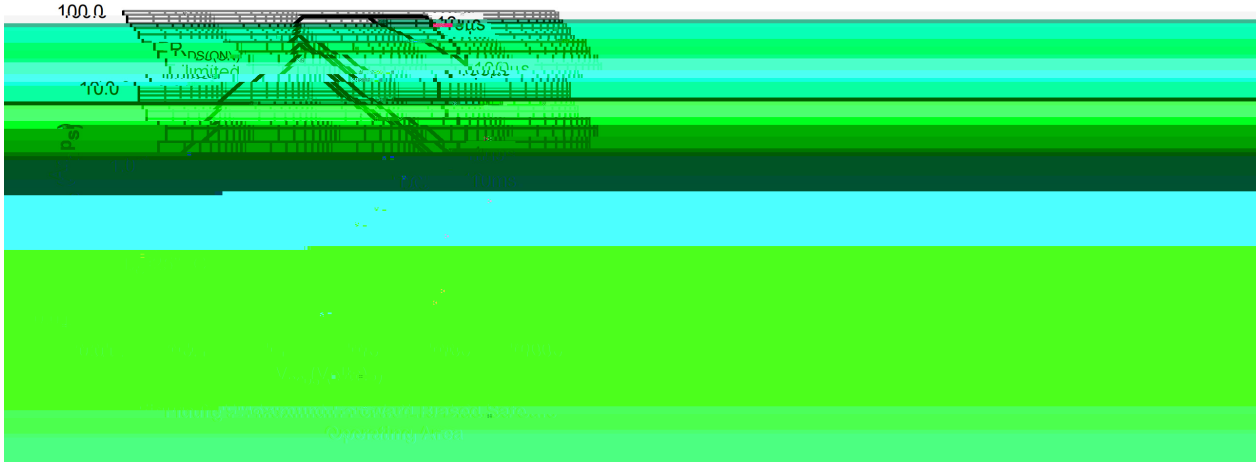


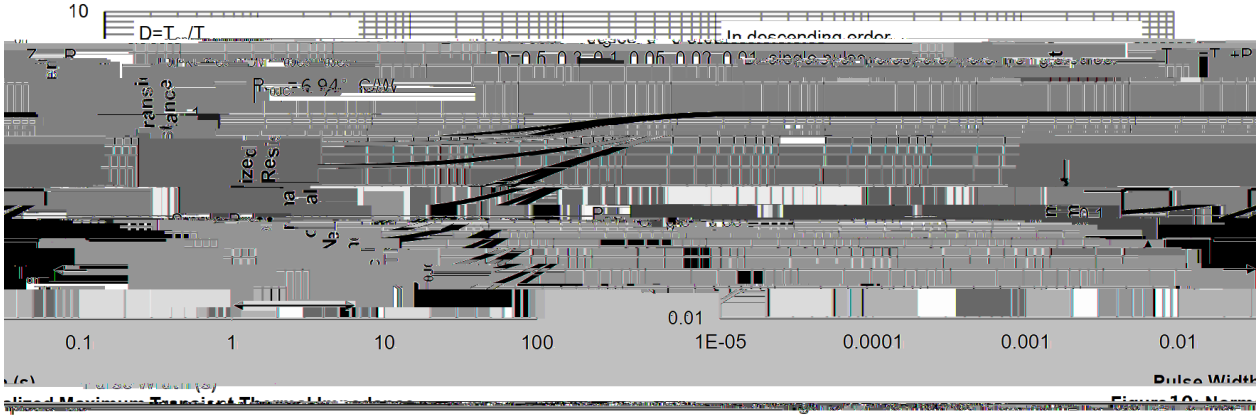
Figure 3 On-Resistance vs. Drain Current and Gate Voltage

Figure 4 On-Resistance vs. Junction Temperature

N- / N-CHANNEL Electrical Characteristic Curve



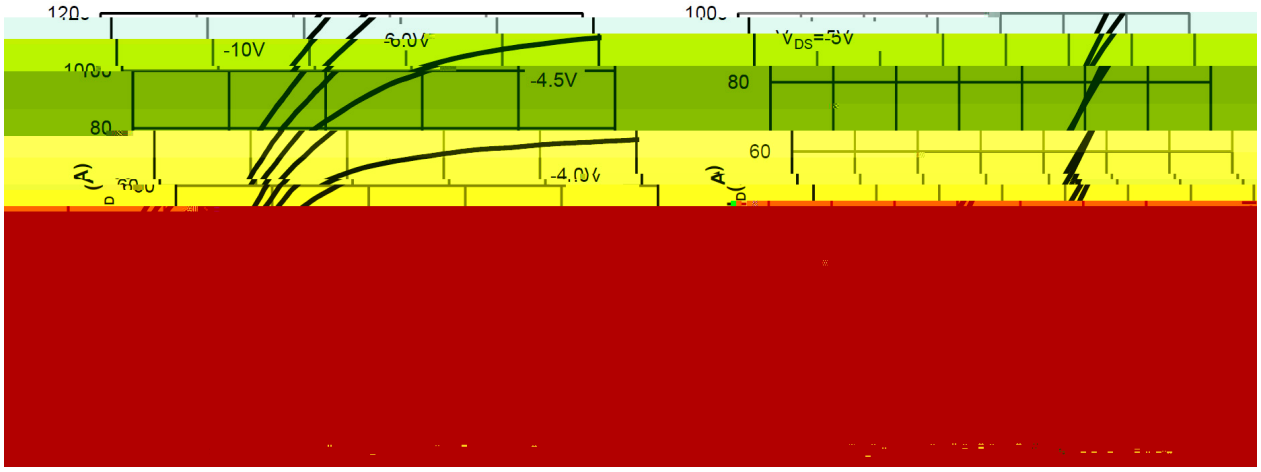




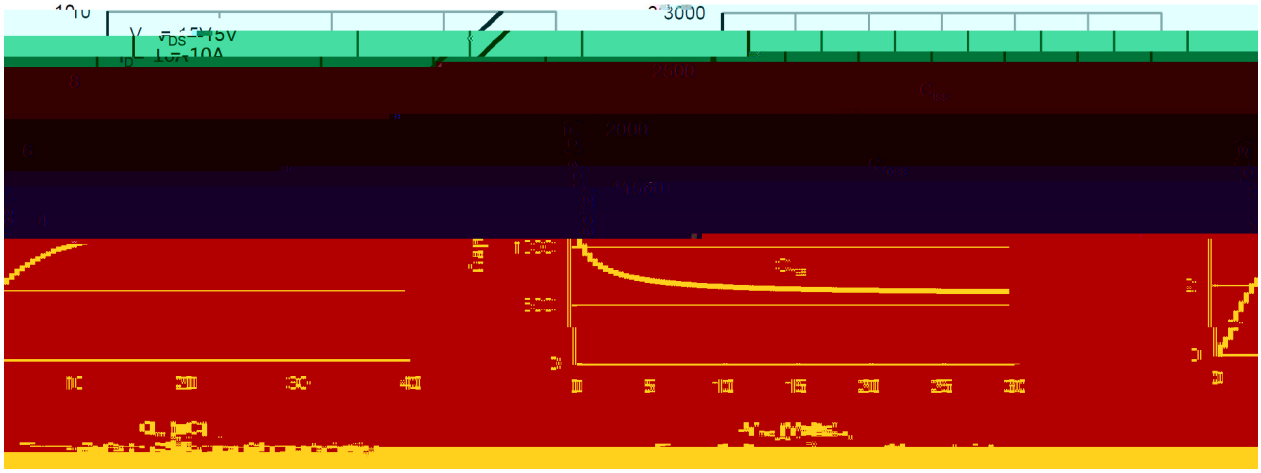
P- /P-CHANNEL Electrical Characteristics(Ta=25

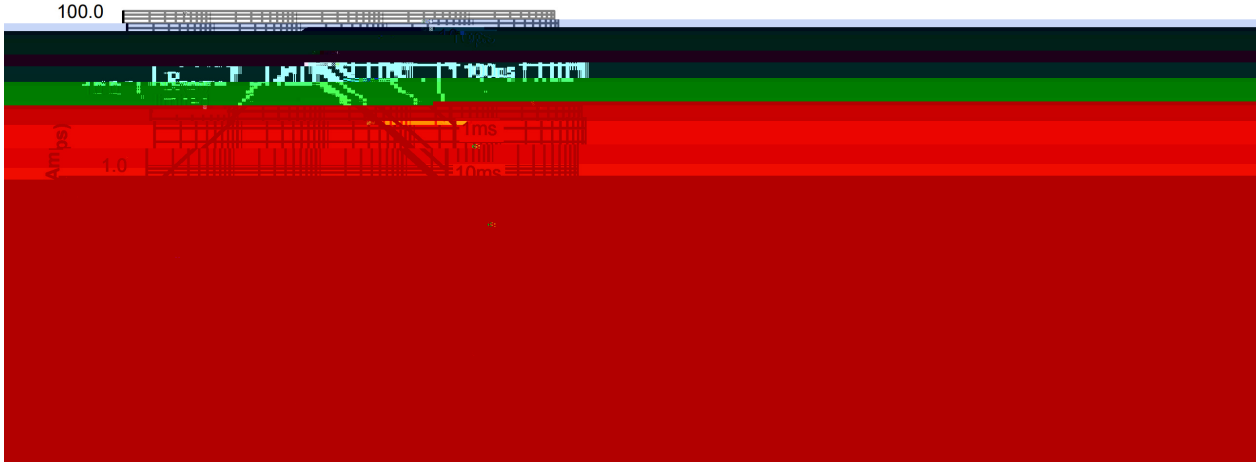
Parameter	N Symbol	; Test Conditions		Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V	I_D=-250μA	-30			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-30	V_{GS}=0V			-1.0	μA
Gate-Body leakage current	I_{GSS}	V_{GS}=±20V	V_{DS}=0V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS}	I_D=-250μA	-1.0	-1.5	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=-10V	I_D=-10A		12	13	mΩ
		V_{GS}=-4.5V	I_D=-10A		17	20	mΩ
Diode Forward Voltage	V_{SD}	V_{GS}=0V	I_S=-1.0A			-1.4	V
Input Capacitance	C_{iss}	V_{DS}=-25V f=1.0MHz	V_{GS}=0V		2100		pF
Output Capacitance	C_{oss}				1900		pF
Reverse Transfer Capacitance	C_{rss}				640		pF
Gate resistance	R_g	V_{DS}=0V f=1.0MHz	V_{GS}=0V		4		Ω
Total Gate Charge	$Q_{g(10V)}$	V_{GS}=-10V I_D=-10A	V_{DS}=-15V		35		nC
Total Gate Charge	$Q_{g(4.5V)}$				17		nC
Gate-Source Charge	Q_{gs}				5.7		nC
Gate-Drain Charge	Q_{gd}				8.8		nC
Turn-On Delay Time	$t_{d(on)}$	V_{DS}=-15 V R_L=1Ω	V_{GS}=-10V R_{GEN}=3Ω		11		ns
Turn-On Rise Time	t_r				7.5		ns
Turn-Off Delay Time	$t_{d(off)}$				43.5		ns
Turn-Off Fall Time	t_f				17.5		ns

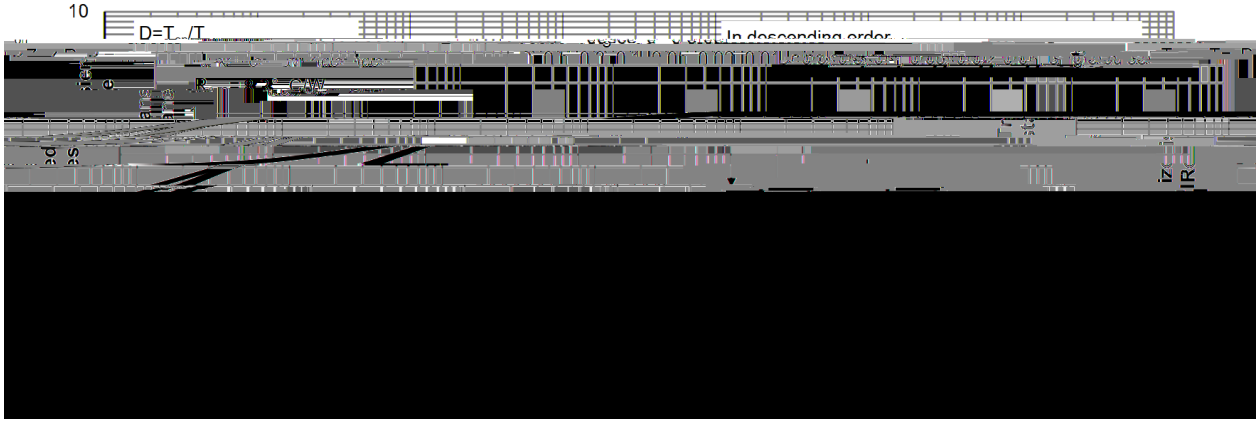
P- / P-CHANNEL Electrical Characteristic Curve



P- \ / P-CHANNEL Electrical Characteristic Curve

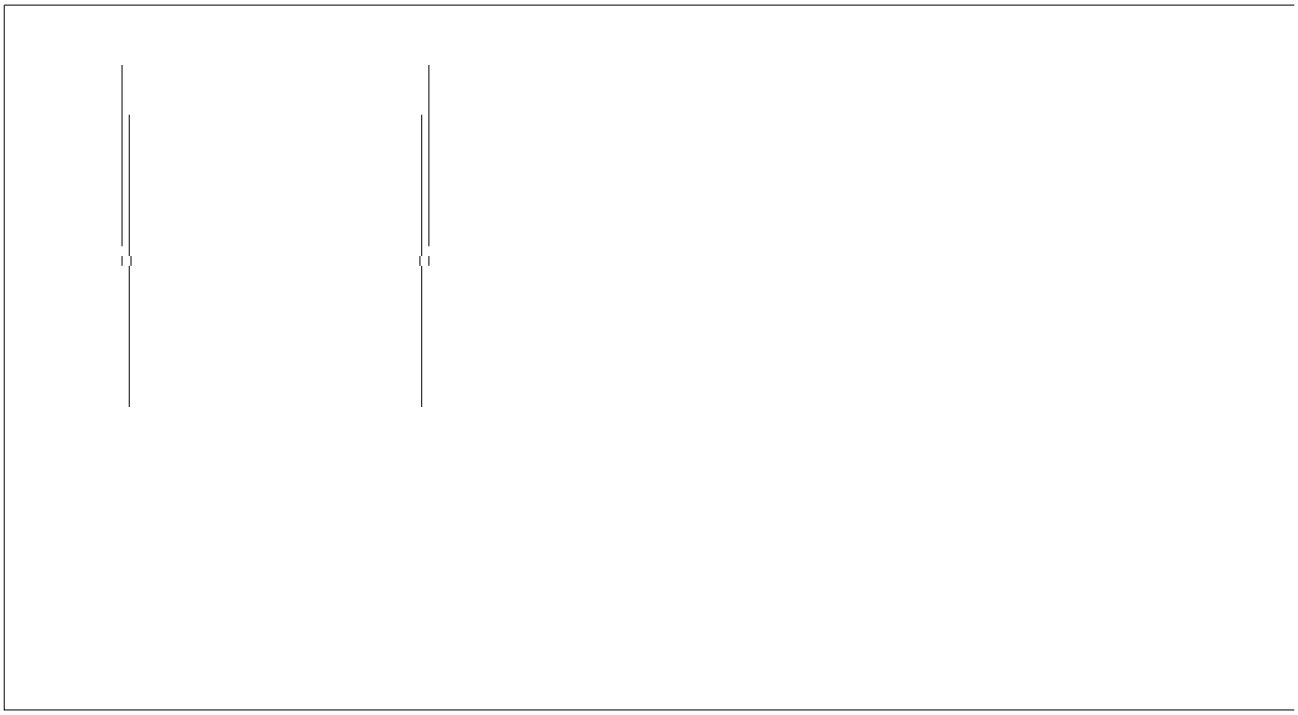




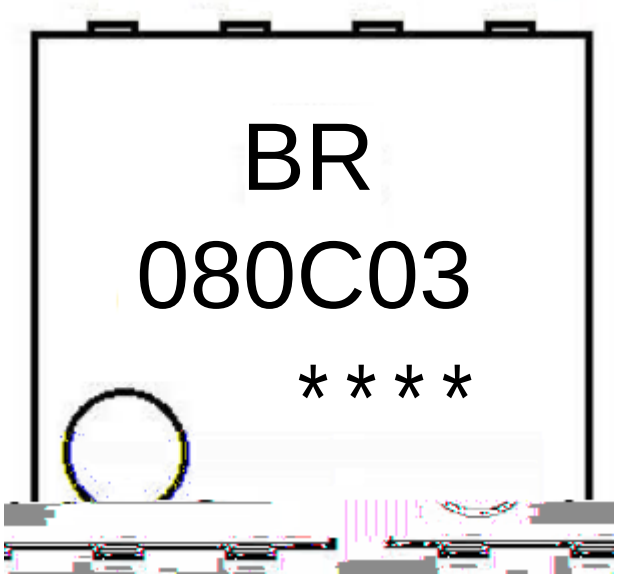


/ Package Dimensions

PDFN3X3-8L Unit:mm



/ Marking Instructions



BR	И
080C03	N
****	N N

Note:

BR:	Company Code
080C03:	Product Type Code
****:	Lot No. Code, code change with Lot No

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



ب

1 أ 150 180 ژ 60 90sec;

2 245±5 ژ 5±0.5sec;

3 ھ 2 10 /sec.

Note:

1.Preheating:150~180 , Time:60~90sec.

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.