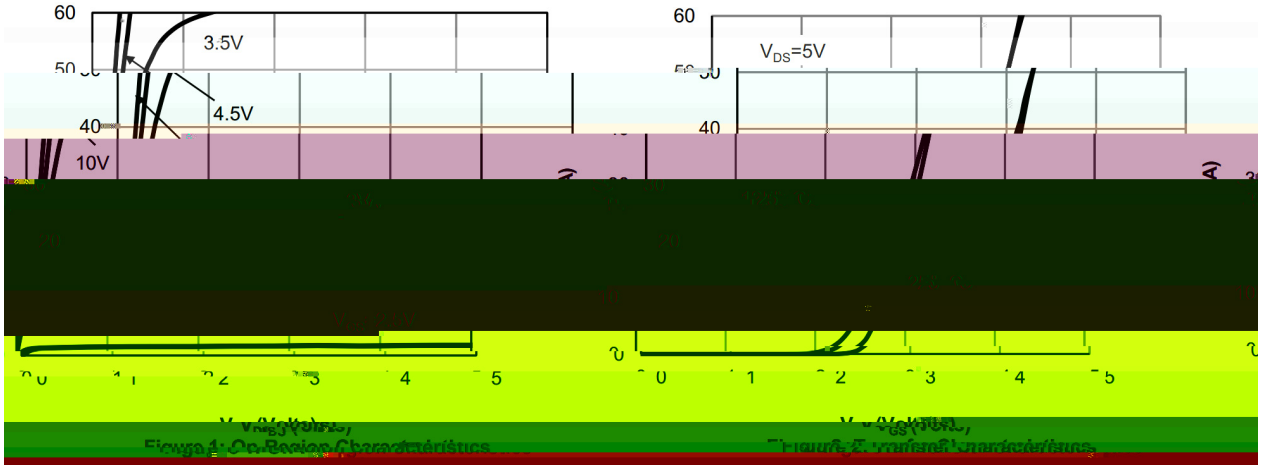
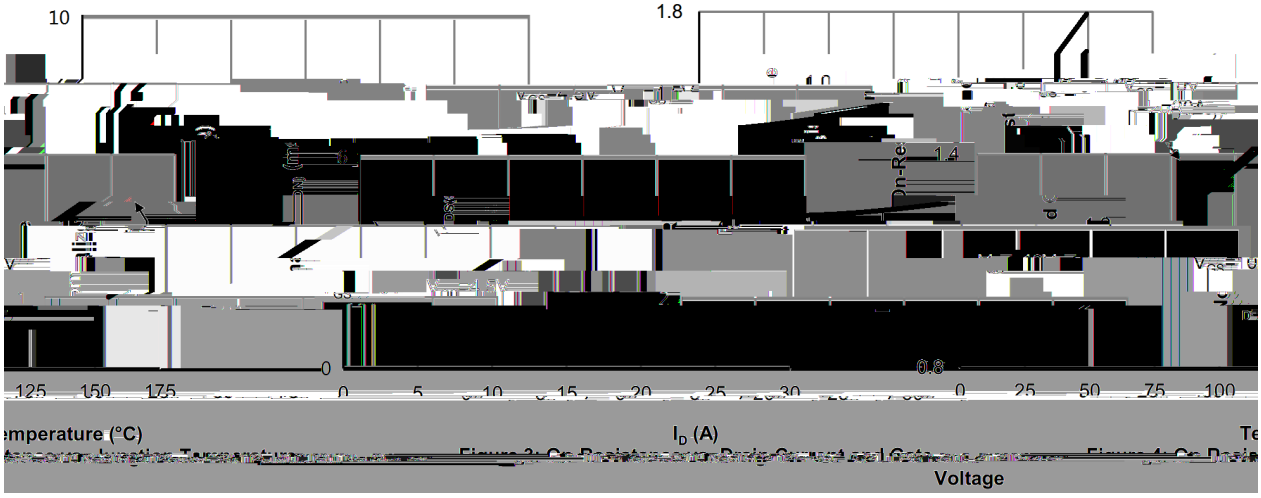
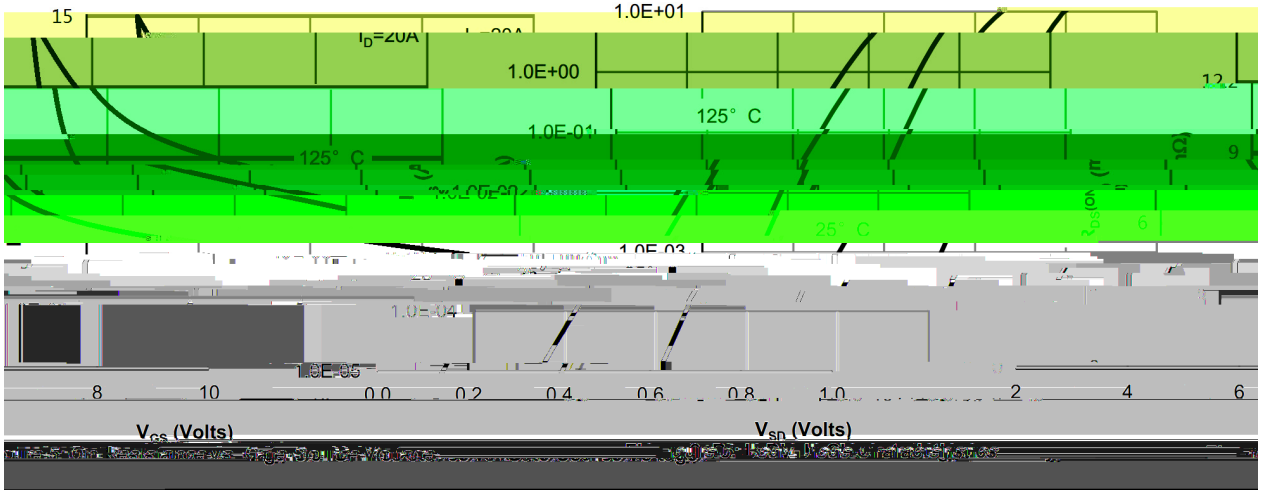
Rev.A Jan.-2024

Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	40	V
Drain Current		I_D(Tc=25℃)	57	A
Drain Current - Pulsed		I_{DM}	137	A
Gate-Source Voltage		V_{GSS}	±20	V
Single Pulsed Avalanche Energy		E_{AS}	583.2	mJ
Avalanche Current		I_{AS}	27	A
Power Dissipation		P_D(Tc=25℃)	30	W
Operating and Storage Temperature Range		T_J,T_{stg}	-55 to 150	
Junction-to-Ambient	t≤10	R_{JA}	40	℃/W
Junction-to-Ambient	Steady-State		75	
Junction-to-Case	Steady-State	R_{JC}	4.2	

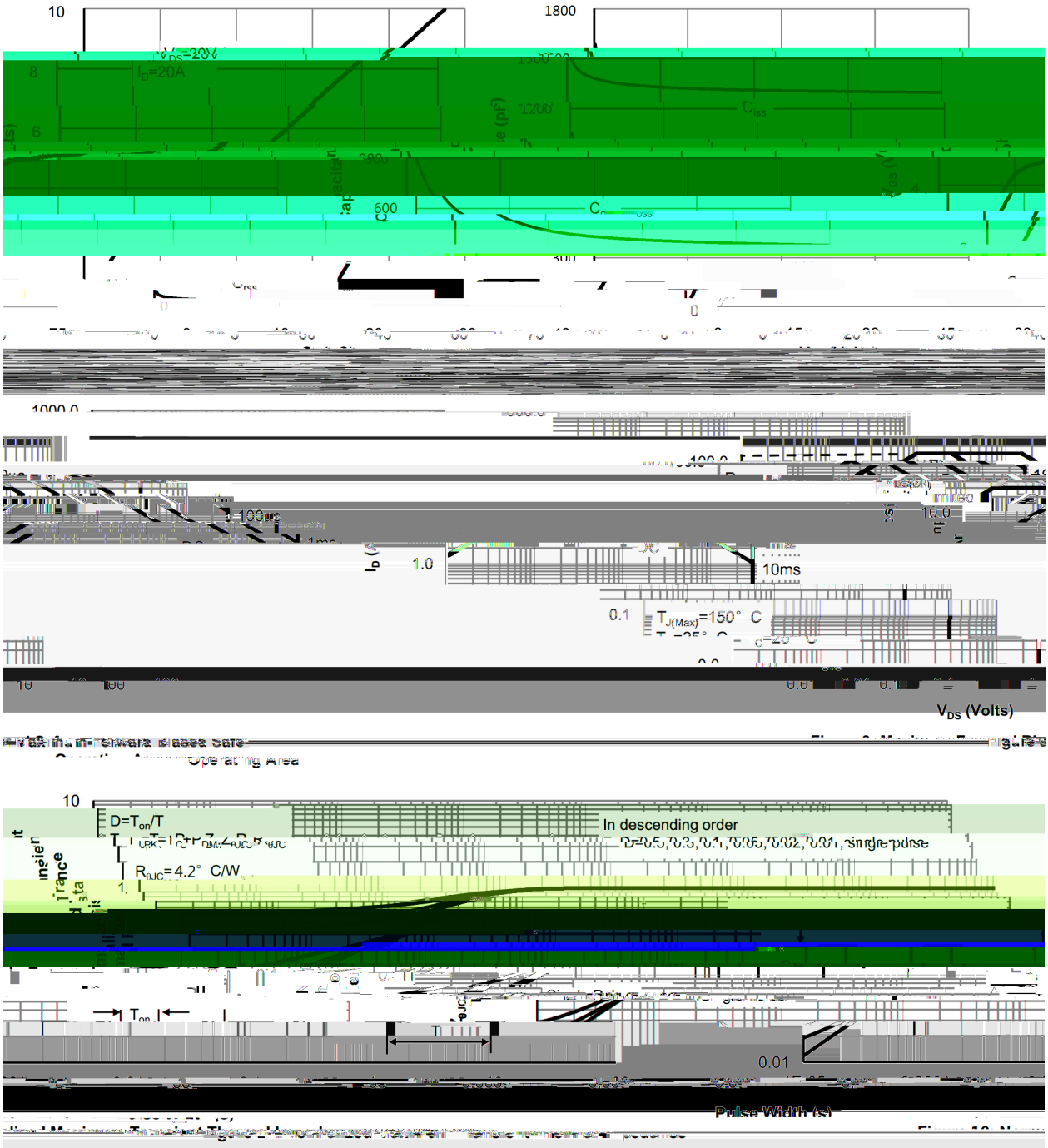
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250 A	40	43		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=40V V_{GS}=0V			1	A
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±20V V_{DS}=0V			±0.1	A
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=250 A	1.0	1.7	2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V I_D=20A		4.5	5	m
		V_{GS}=4.5V I_D=10A		6.2	10	m
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V I_S=1A			1.2	V
Input Capacitance	C_{iss}	V_{DS}=25V V_{GS}=0V f=1.0MHz		1300		pF


60
3.5V
4.5V
40
10V
60
V_{DS}=5V
40


10
1.8
1.4
0
0.8
I_D (A)
Voltage

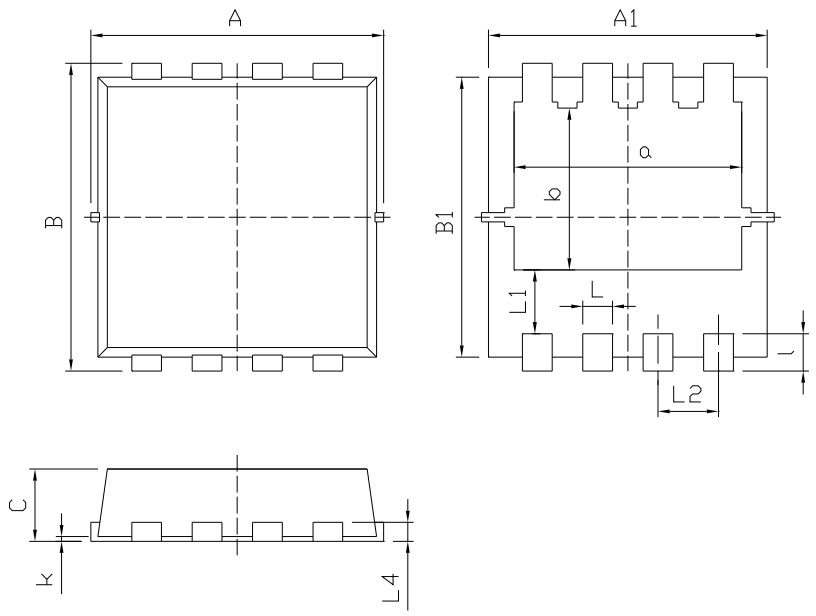

15
1.0E+01
I_D=20A
1.0E+00
125° C
1.0E-01
125° C
25° C
8
10
0.0
0.2
0.4
0.6
0.8
1.0
2
4
6
V_{GS} (Volts)
V_{SD} (Volts)

/


10
1800
I_D=20A
C_{iss}
600
0
100μs
1.0
10ms
0.1
$T_{J(Max)}$=150° C
V_{DS} (Volts)
Operating Area
10
D=T_{on}/T
In descending order
$R_{\theta JC}$=4.2° C/W
T_{on}
0.01
Pulse Width (s)

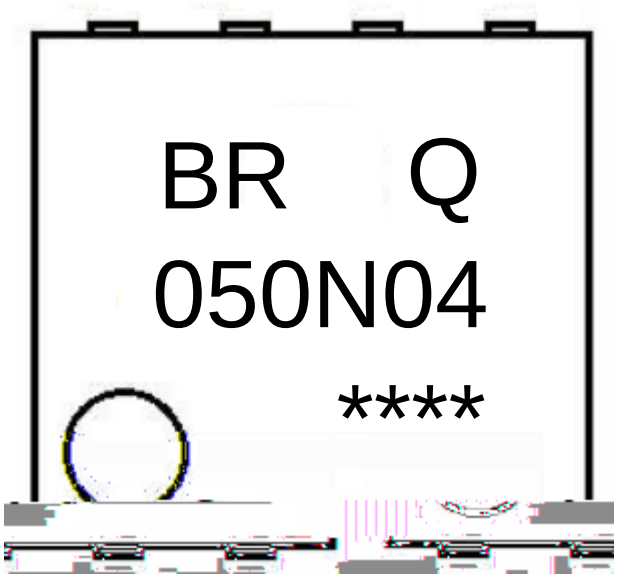
PDFN3X3A-8L

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	2.35	2.45	2.55
b	1.635	1.735	1.835
k	0.00	-	0.05
l	0.30	0.40	0.50

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BR

Q

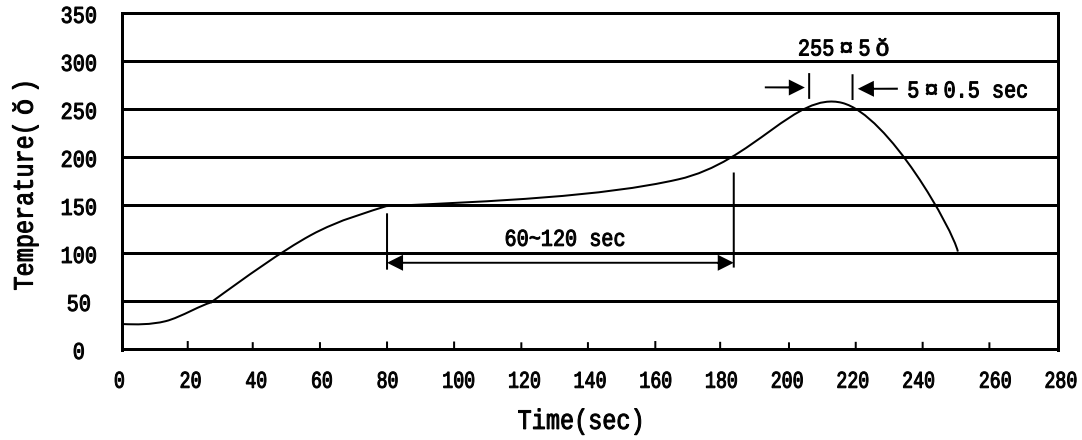
050N04

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Note:

BR:	Company Code
Q:	Automobile halogen-free product Code
050N04:	Product Type Code
****:	Lot No. Code, code change with Lot No

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

1		150	200		60	120sec;	1.Preheating:150~200 , Time:60~120sec.
2		255±5				5±0.5sec;	2.Peak Temp.:255±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 mm³)
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
PDFN3×3A-8L	5,000	2	10,000	6	60,000	13 ρ ×12	360×360×50	380×335×366