SGIQ6Ö6D0;0 ḾḾÞ S ڜ PRV ß ѽ Ƶ ٦

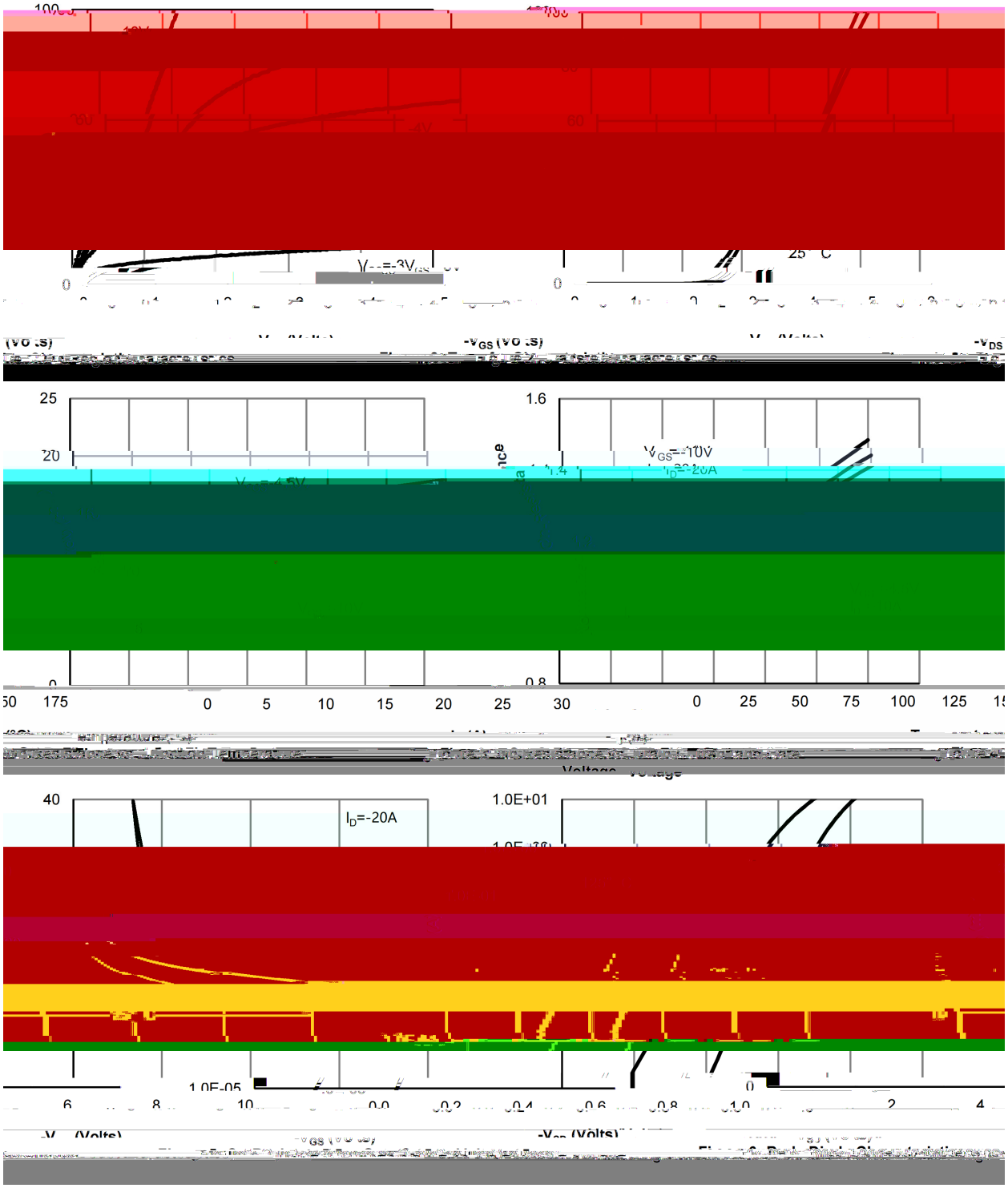
BRCS120P03YBQ

Rev.A Nov.-2022

/ Electrical Characteristics(Ta=25)

v ̈Ω Parameter	ϒ N Symbol	Ш ;ϯ ϒ Test Conditions	ώ ή Ö Min	Ε ʒ Ö Typ	ώ ² Ö Max	D Ч Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-250μA V_{GS}=0V	-30	-36		V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-30V V_{GS}=0V			-1	μA
Gate-Body leakage current	I_{GSS}	V_{DS}=0V V_{GS}=±20V			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=-250μA	-1.0	-1.7	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V I_D=-20A		10.5	12	mΩ
		V_{GS}=-4.5V I_D=-10A		16.5	18	
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		7.5	10	Ω
Input Capacitance	C_{iss}	V_{GS}=0V V_{DS}=-25V f=1MHz		2100		pF
Output Capacitance	C_{oss}			340		
Reverse Transfer Capacitance	C_{rss}			210		
Total Gate Charge	Q_g(10V)	V_{GS}=-10V V_{DS}=-15V I_D=-17A		35		nC
Total Gate Charge	Q_g(4.5V)			17		
Gate-Source Charge	Q_{gs}			5.7		
Gate-Drain Charge	Q_{gd}			8.8		
Turn-on Delay Time	$t_{d(ON)}$	V_{GS}=-10V V_{DS}=-15V R_L=0.9Ω R_{GEN}=3Ω		11		ns
Turn-on Rise Time	t_r			7.5		
Turn-off Delay Time	$t_{d(OFF)}$			43.5		
Turn-off Fall Time	t_f			17.5		

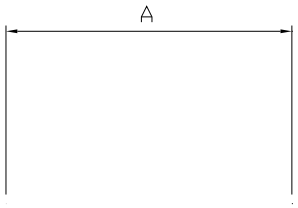
/ Electrical Characteristic Curve



/ Package Dimensions

PDFN3X3A-8L

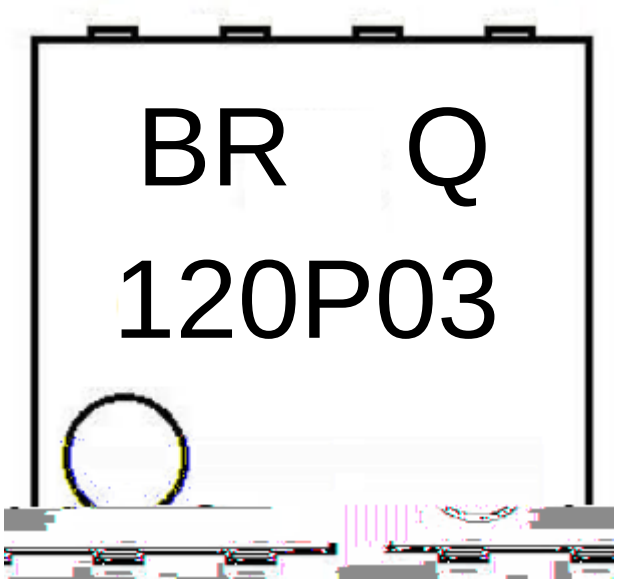
Unit:mm



Dimensions In Millimeterer
Symbol M

Rev.00 202011

/ Marking Instructions



ͻ ˝ χ	
BR χ	ѭ ϗ Ͷ Ґϧ
120P03 χ	ѭ ϳ ᴺ Ґϧ
---- χ	ѭ ι ғ ή ᴺ Ґϧ ι ₺ ι ғ ή ᴺ Ψ ϙ
Note:	
BR:	Company Code
120P03:	Product Type Code
****:	Lot No. Code, code change with Lot No

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

ب ˝ χ

1 Ĺ ♬ □ ў 150 Ќ 200 ł ı `H ڑ 60 Ќ 120sec;

2 Š Ө □ ў 255 ° 5 ł ı `H ڑ 'Y ٨ ₩ 5 ° 0.5sec;

3 ì ˙ ٧ ˛ ɔ ﷺ ў ₩ 2 Ќ 10 ł /sec.

Note:

1.Preheating:150~200 ł , Time:60~120sec.

2.Peak Temp.:255 ° 5 ł , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ł /sec.

/ Resistance to Soldering Heat Test Conditions

□ ў χ 260 ° 5 ł `H ڑ χ 10 ° 1 sec. Temp.:260 ° 5 ł Time:10 ° 1 sec

/ Packaging SPEC.

ი ` ץ Ł / REEL

Package Type	Units	Dimension	(unit mm³)