VRS0; ṂṂ Ŧ S ǯ ʄ ᾧ Ẓ ˥
P-Channel Enhancement Mode Fielhm "

v ″Ω Parameter	ϒ N Symbol	″Ω Ö Rating	D Ч Unit
Drain-Source Voltage	V_{DSS}	-40	V
Gate-Source Voltage	V_{GSS}	±20	V
Continuous Drain Current	I_D (T_a=25°C)	-10	A
Continuous Drain Current	I_D (T_a=70°C)	-8	A
Power Dissipation for Single Operation	P_D (T_a=25)	1.7	W
Power Dissipation for Single Operation	P_D (T_a=70)	1.1	W

D

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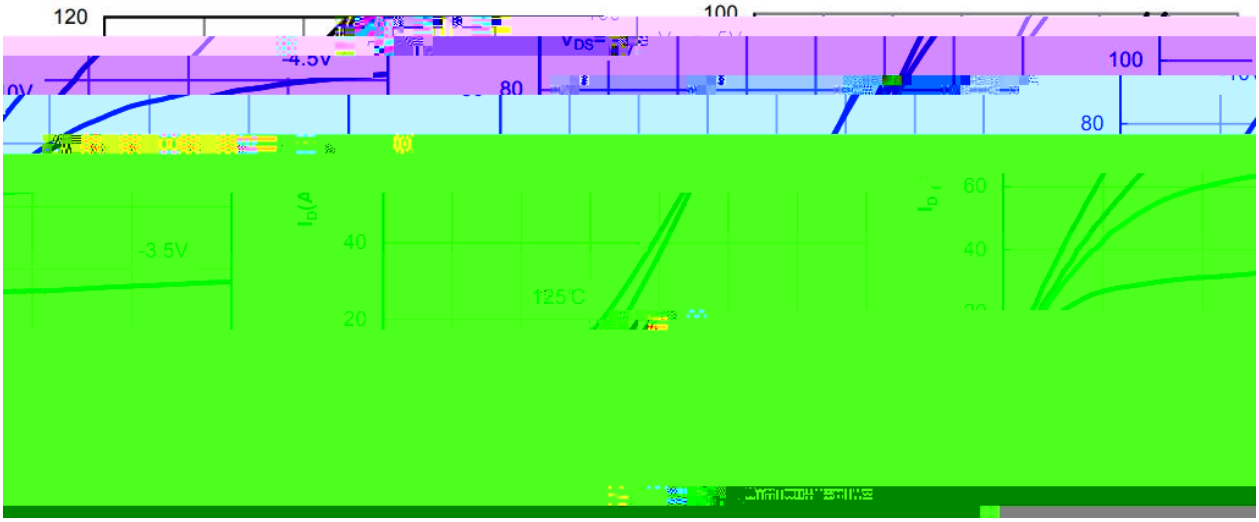
v ̈Ω Parameter	ϒ ᴺ Symbol	⅄ ⁝ˀ ϒ Test Conditions	ѡ ṇ Ө Min	Ɛ ȝ Ө Typ	ѡ ᶻ Ө Max	ᴅ Ꮒ Unit
Drain-Source Breakdown Voltage	BV_{DSS}	I_D=-250μA V_{GS}=0V	-40			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=-40V V_{GS}=0V			-1.0	μA
		V_{DS}=-40V V_{GS}=0V T_J=55°C			-5.0	
Gate-Body leakage current	I_{GSS}	V_{DS}=0V V_{GS}=±20V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=-250μA	-1.2	-1.6	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=-10V I_D=-10A		13.1	15	mΩ
		V_{GS}=-4.5V I_D=-7A		18	21	
Forward Transconductance	g_{FS}	V_{DS}=-5V I_D=-10A		9.5		S
Diode Forward Voltage	V_{SD}	I_S=-1A V_{GS}=0V		-0.8	-1.0	V
Total Gate Charge	Q_g(10V)	V_{GS}=-10V V_{DS}=-20V I_D=-10A		42	55	nC
Total Gate Charge	Q_g(4.5V)			18.6		
Gate-Source Charge	Q_{gs}			7		
Gate-Drain Charge	Q_{gd}			8.6		
Gate Resistance	R_g	V_{GS}=0V V_{DS}=0V f=1MHz		8.5		Ω
Input Capacitance	C_{iss}	V_{GS}=0V V_{DS}=-25V f=1MHz		3300		pF
Output Capacitance	C_{oss}			135		
Reverse Transfer Capacitance	C_{rss}			177		
Turn-on Delay Time	$t_{d(ON)}$	V_{GS}=-10V V_{DS}=-20V R_L=2Ω R_{GEN}=3Ω		9.4		ns
Turn-on Rise Time	t_r			20		
Turn-off Delay Time	$t_{d(OFF)}$			55		
Turn-off Fall Time	t_f			30		



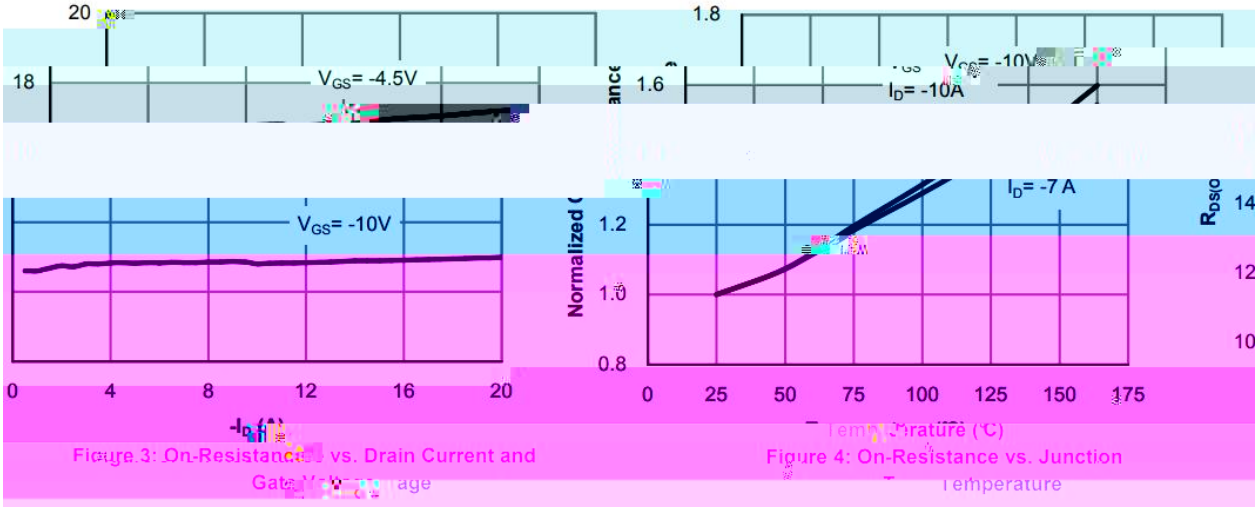
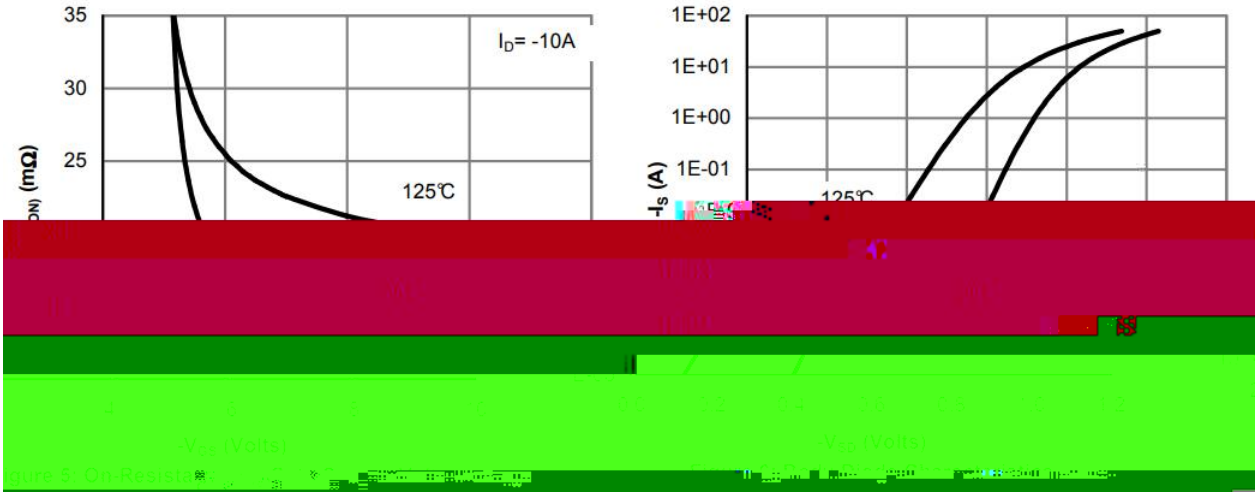
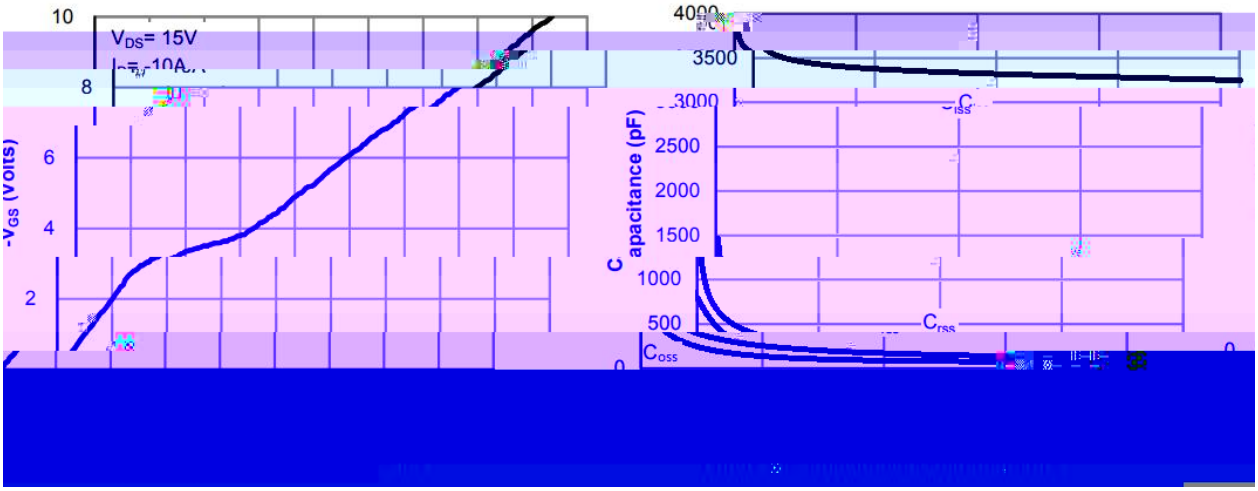
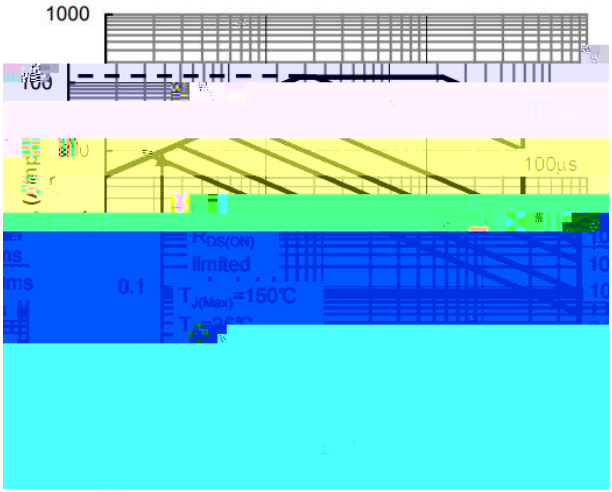


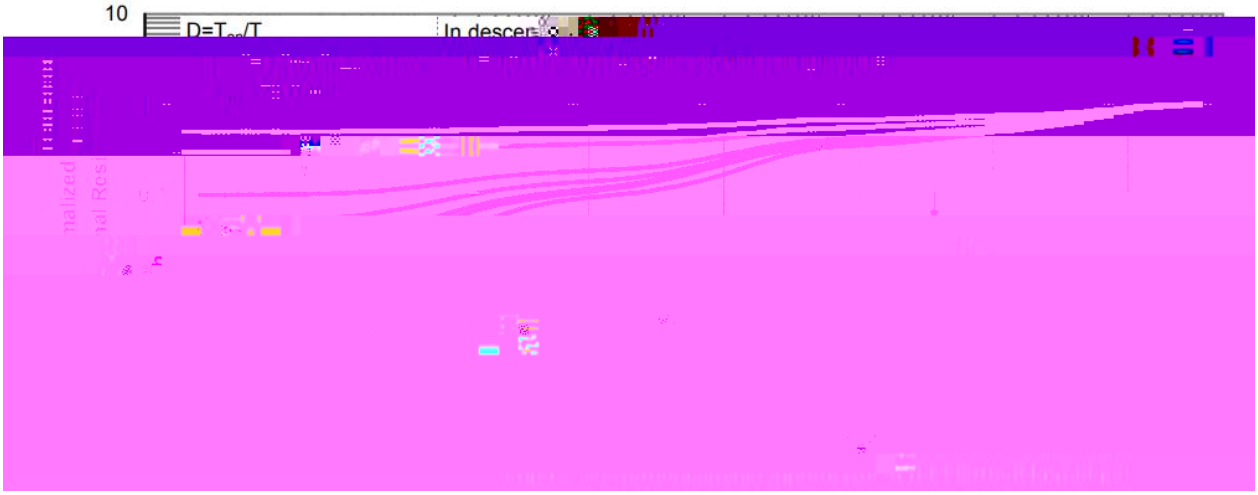
Figure 3: On-Resistance vs. Drain Current and Gate Voltage

Figure 4: On-Resistance vs. Junction Temperature

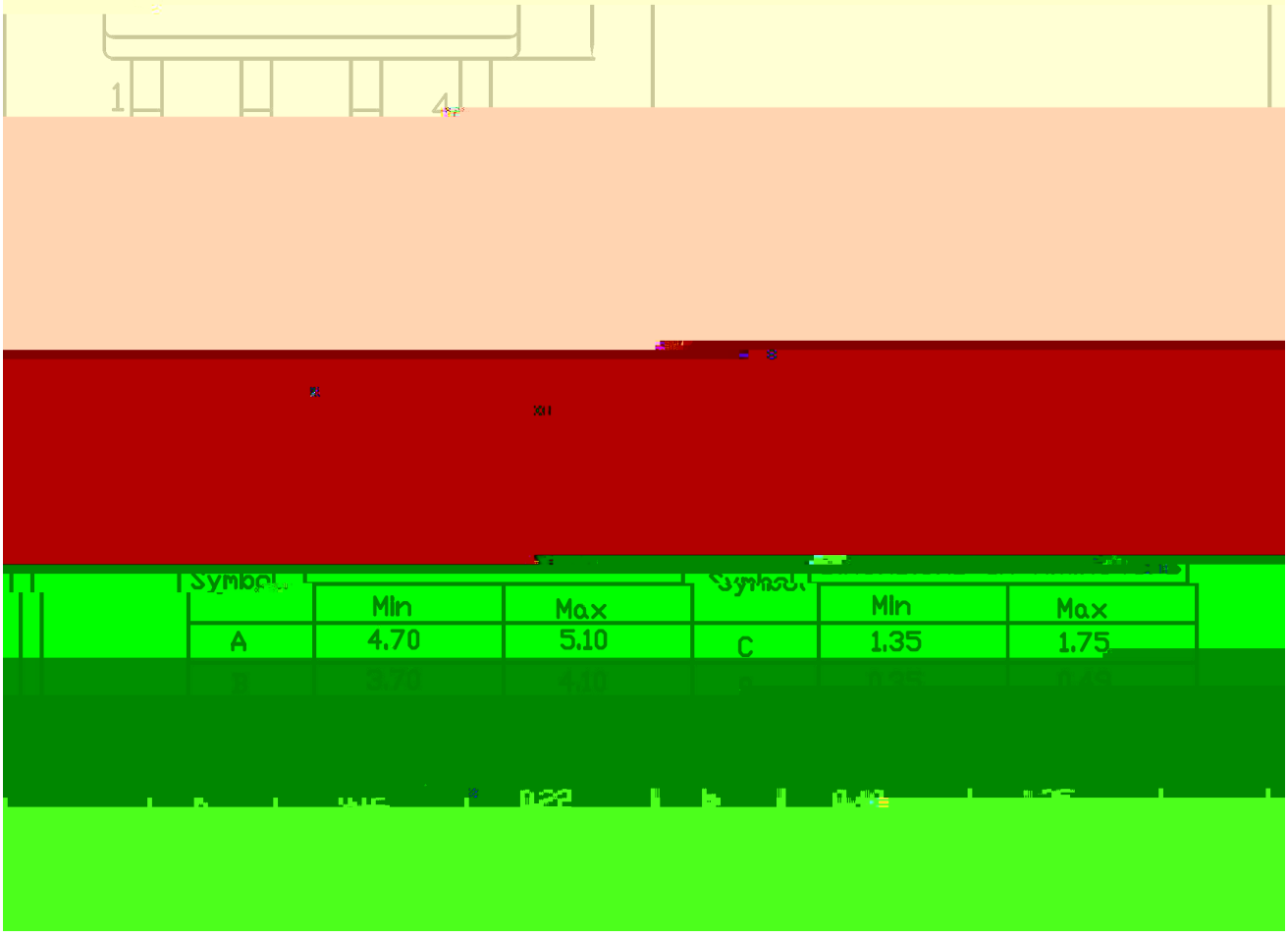



10
V_{DS}= 15V
8
6
4
2
-V_{GS} (Volts)
4000
3500
3000
2500
2000
1500
1000
500
0
C apacitance (pF)
C_{rss}
C_{oss}

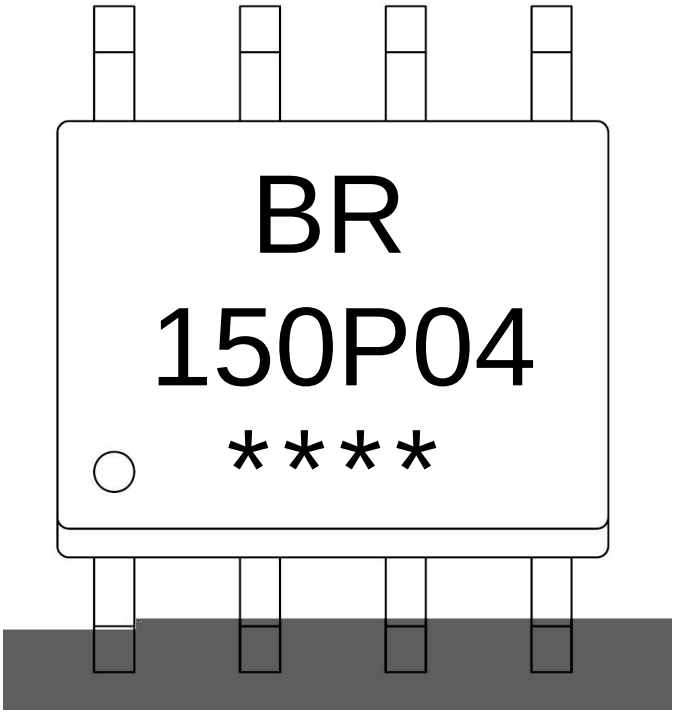

1000
100µs
$R_{DS(ON)}$
limited
0.1
$T_{J(Max)}$=150℃


10
D=T_{on}/T

SOP-8 Unit:mm



Symbol	Min	Max	Symbol	Min	Max
A	4.70	5.10	C	1.35	1.75
B	3.70	4.10	D	0.35	0.49

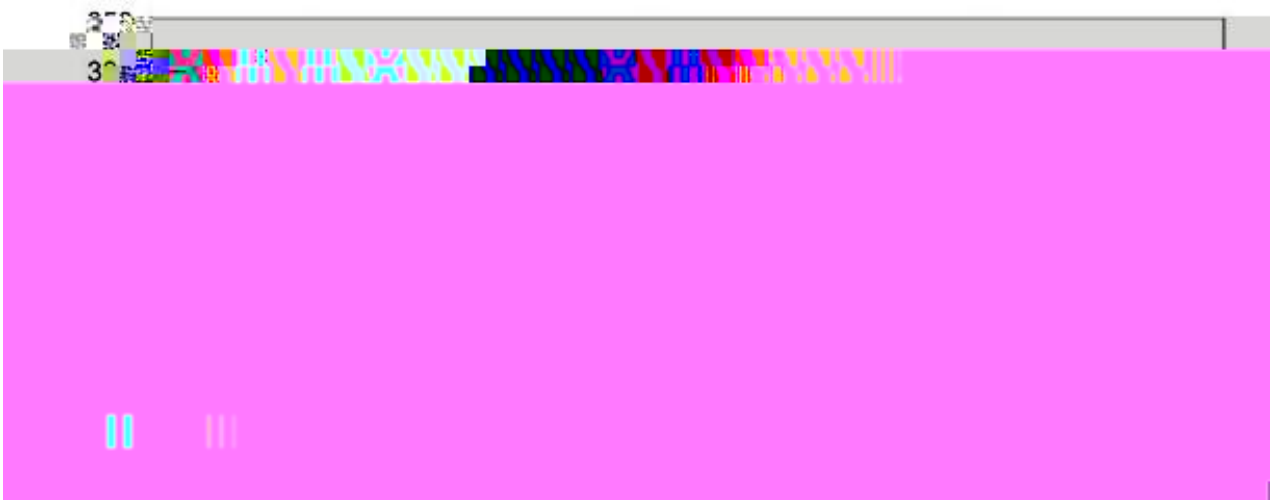


ب ˝ χ

BR χ	ѭ ʒ ᴎ Ɱ
150P04 χ	ѭ ʒ ᴺ Ɱ
**** χ	ѭ ɨ ɾ ŕ ᴺ Ɱ ɩ ɞ ɨ ɾ ŕ ᴺ ψ ק

Note:

BR:	Company Code.
150P04:	Product Type
****:	Lot No. Code, code change with Lot No.



ب ˝ χ

1 أ ♬ □ ŷ 150 Ḱ 180 ɫ ı `H ڑ 60 Ḱ 90sec;

2 Š Ö □ ŷ 245 ° 5 ɫ ı `H ڑ ˙Y ⁄ı ⌘ 5 ° 0.5sec;

3 ì ˙ ˥ ˛ ɔ ھ ŷ ⌘ 2 Ḱ 10 ɫ /sec.

Note:

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

2.Peak Temp.:245 ° 5 ɫ , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ɫ /sec.

□ ŷ χ 260 ° 5 ɫ `H ڑ χ 10 ° 1 sec. Temp.:260±5 Time:10±1 sec

ɔ` γ ŁŁ / 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
SOP/ESOP-8	4,000							