

Rev.A May.-2020

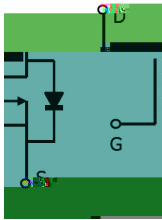
P-Channel Enhancement Mode Field Effect Transistor in a SOP-8 Plastic Package.

$V_{DS} (V) = -40V$

$I_D = -10 A (V_{GS} = -20V)$

$R_{DS(ON)} < 15m\Omega (V_{GS} = -10V)$

Power Management in Notebook computer, Portable Equipment and Battery powered systems.



PIN1	S	PIN 2	S	PIN 3	S	PIN 4	G
PIN 5	D	PIN 6	D	PIN 7	D	PIN 8	D

See Marking Instructions.

Rev.A May.-2020

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-40	V
Gate-Source Voltage	V_{GS}	± 20	V
Continuous Drain Current	$I_D (T_a=25^{\circ}\text{C})$	-10	A
Continuous Drain Current	$I_D (T_a=70^{\circ}\text{C})$	-8	A
Power Dissipation for Single Operation	$P_D (T_a=25^{\circ}\text{C})$	1.7	W
Power Dissipation for Single Operation	$P_D (T_a=70^{\circ}\text{C})$	1.1	W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$I_D=-250\mu A$ $V_{GS}=0V$	-40			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-40V$ $V_{GS}=0V$			-1.0	μA
		$V_{DS}=-40V$ $V_{GS}=0V$ $T_J=55^\circ C$			-5.0	
Gate-Body leakage current	I_{GSS}	$V_{DS}=0V$ $V_{GS}=\pm 20V$			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=-250\mu A$	-1.2	-1.6	-2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=-10V$ $I_D=-10A$		13.1	15	m
		$V_{GS}=-4.5V$ $I_D=-7A$		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	$V_{GS}=0V$ $f=1MHz$ $V_{DS}=0V$		8.5		Ω
Input Capacitance	C_{iss}	$V_{GS}=0V$ $f=1MHz$ $V_{DS}=-25V$		3300		pF
Output Capacitance	C_{oss}			135		
Reverse Transfer Capacitance	C_{rss}			177		
Turn-on Delay Time	$t_{d(on)}$	$V_{GS}=-10V$ $V_{DS}=-20V$ $R_L=2\Omega$ $R_{GEN}=3\Omega$		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		

Rev.A May.-2020

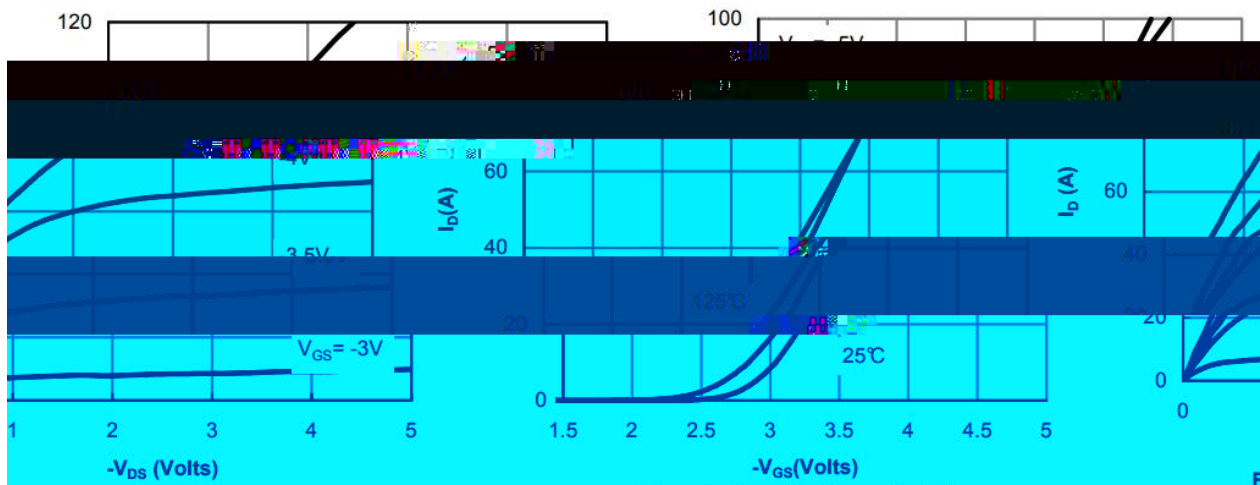
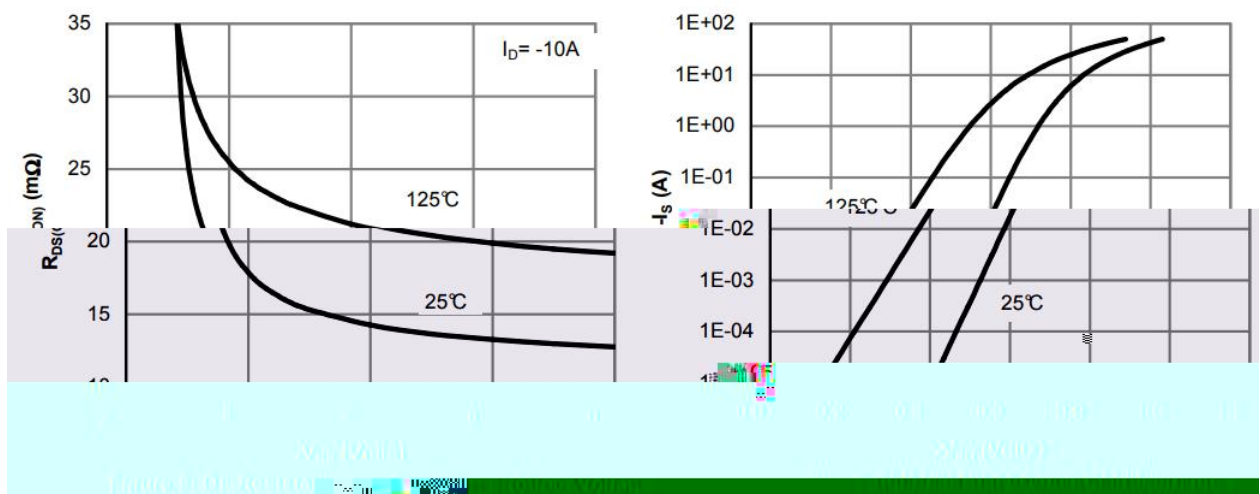
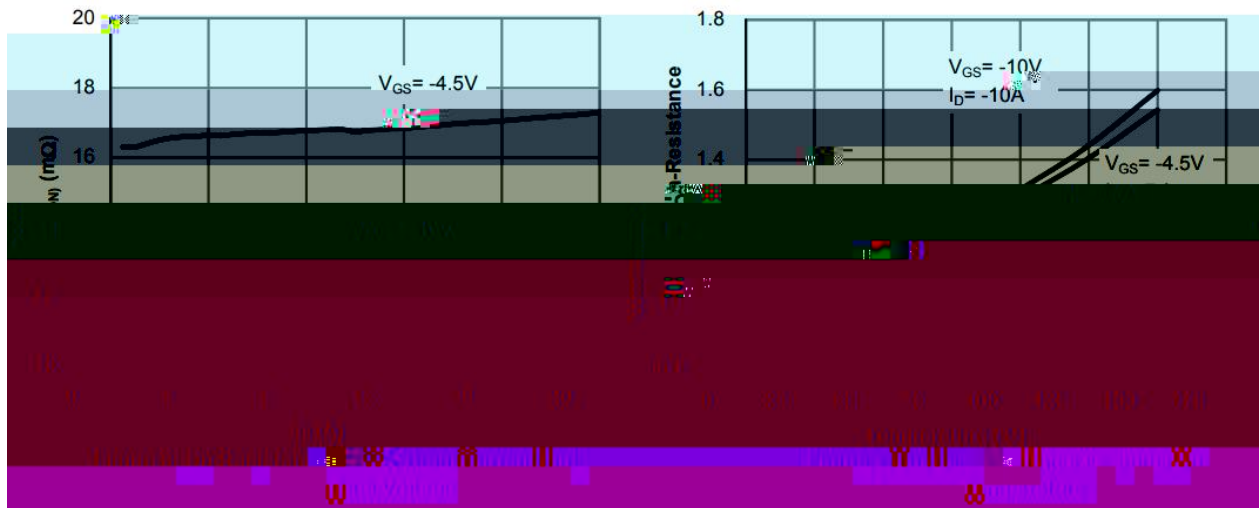


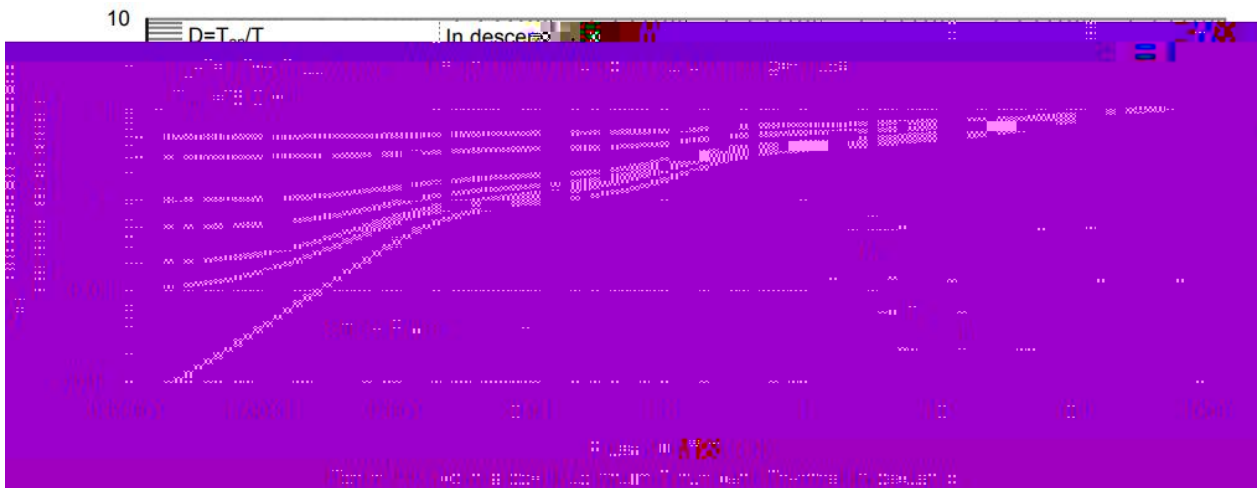
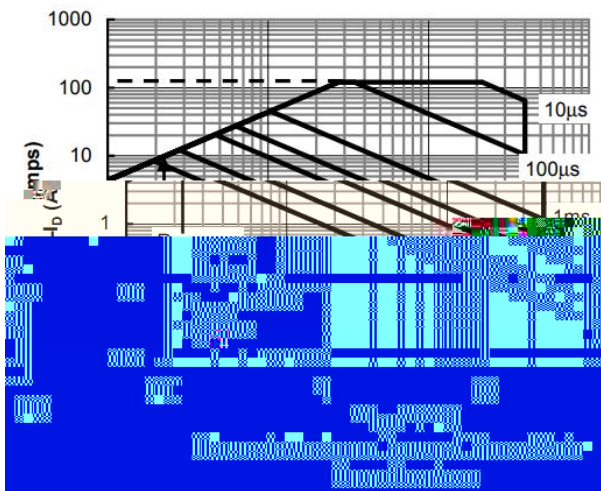
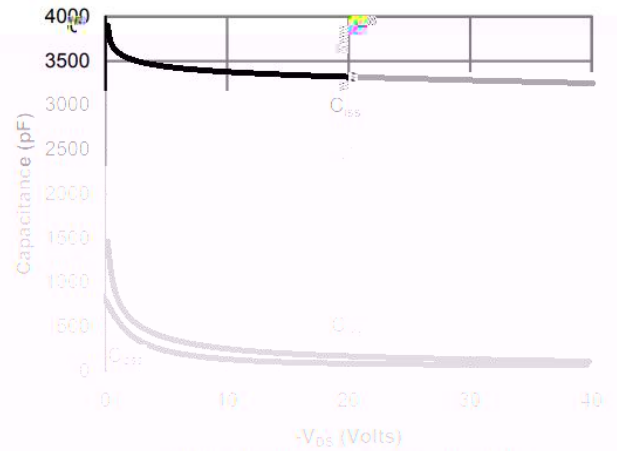
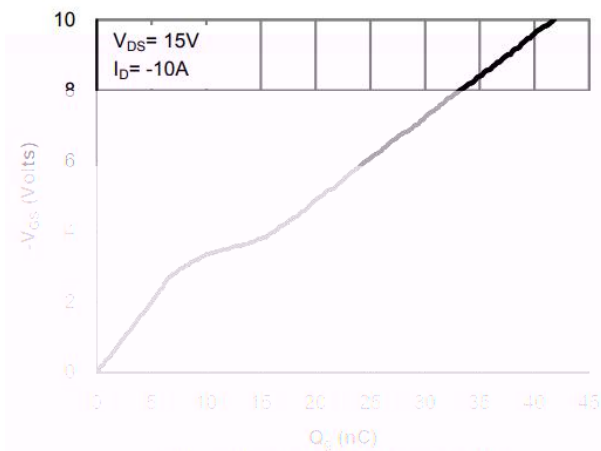
Figure 1: On-Region Characteristics

Figure 2: Transfer Characteristics



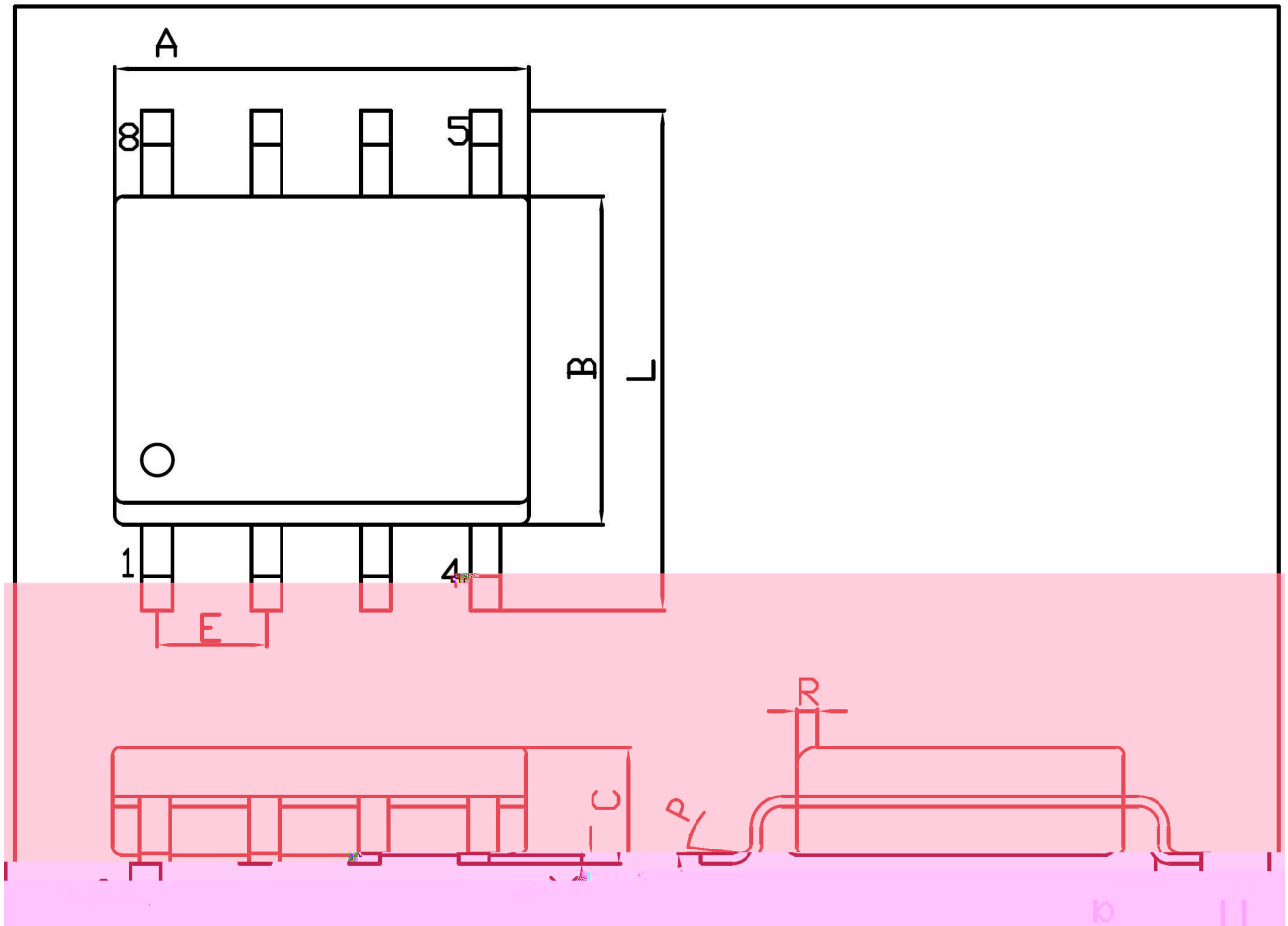
Rev.A May.-2020

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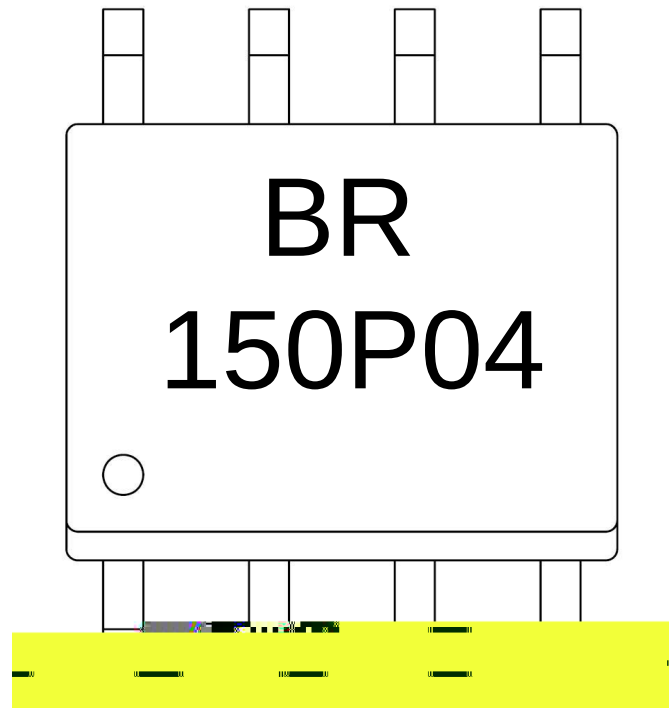


SOP-8

Unit:mm



Dimensions In Millimeters			Dimensions In Millimeters		
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
L	6.80	8.20	E	0.30	0.40
E	1.27 BSC		F	0°	7°
K	0.12	0.22	b	0.40	1.25



BR

150P04

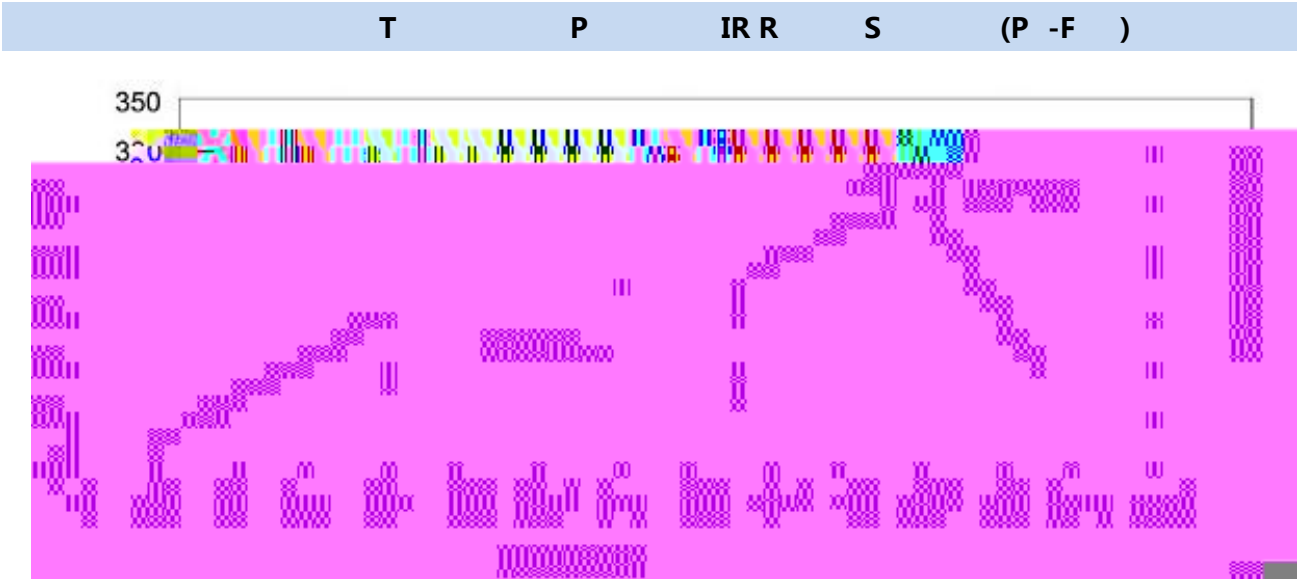
Note:

BR: Company Code.

150P04: Product Type

****: Lot No. Code, code change with Lot No.

Rev.A May.-2020



Note:

- | | | | | | |
|---|-----|-----|----|---------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245 | 5 | 5 | 0.5sec; | 2.Peak Temp.:245 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
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/ REEL

Package Type	Units					Dimension			(unit mm ³)
	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								