

BRCS5N10MC

Rev.E Apr.-2024



蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

SOT23-3 N

N- CHANNEL MOSFET in a SOT23-3 Plastic Package.

$V_{DS}=100V$ $I_D=5A$

$R_{DS(on)1}@10V \leq 175m\Omega$ (Type.120m Ω)

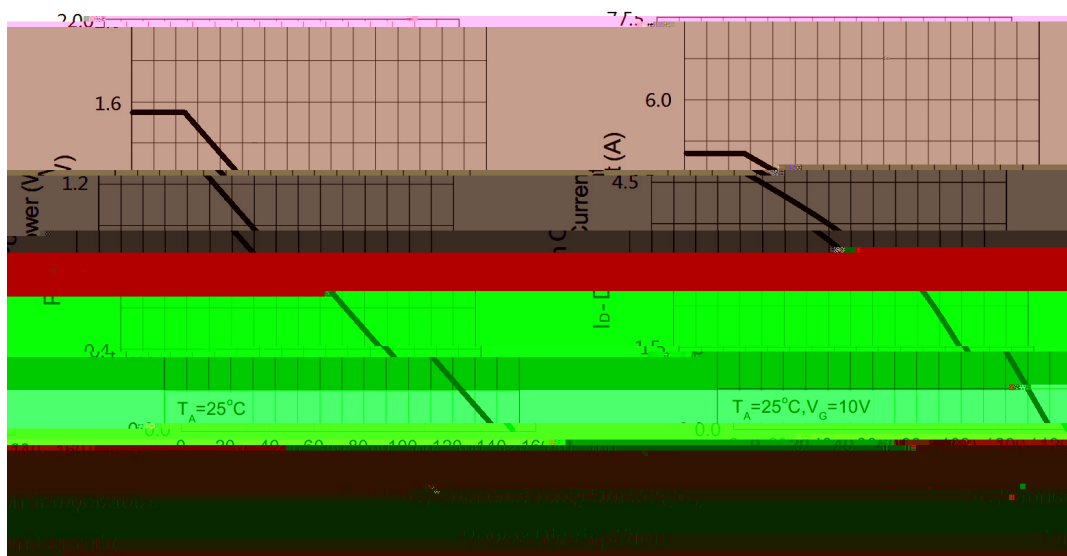
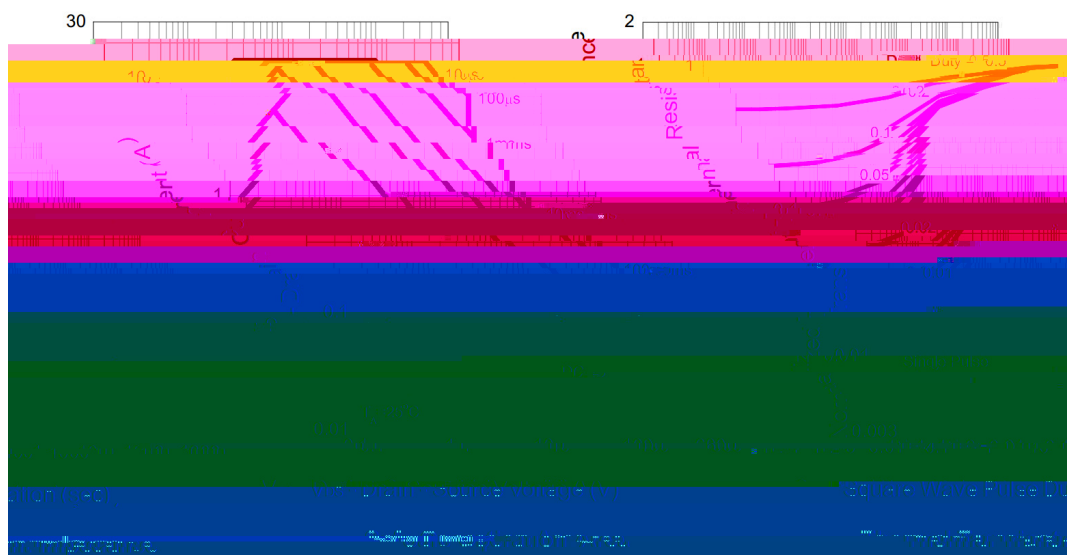
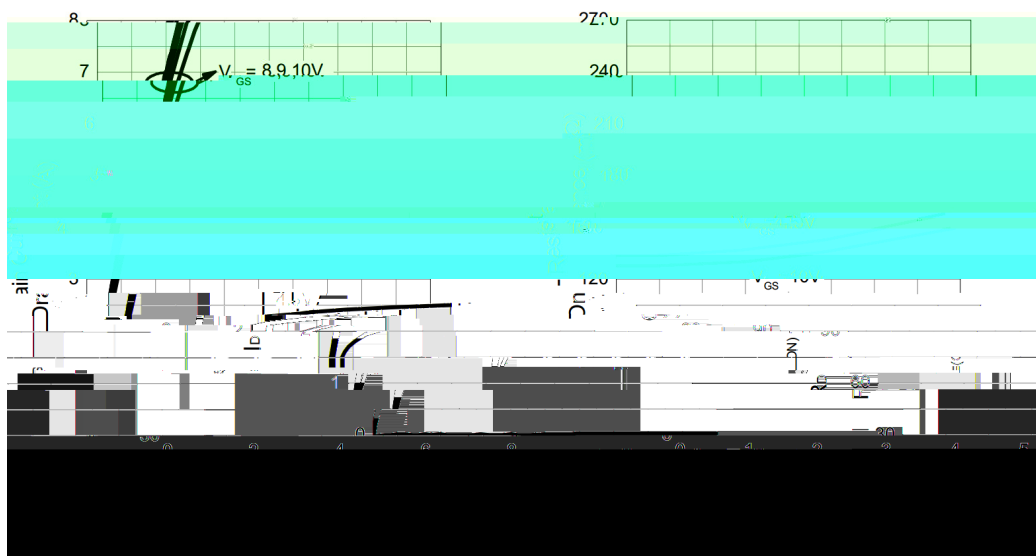
$R_{DS(on)2}@4.5V \leq 235m\Omega$ (Type.150m Ω)



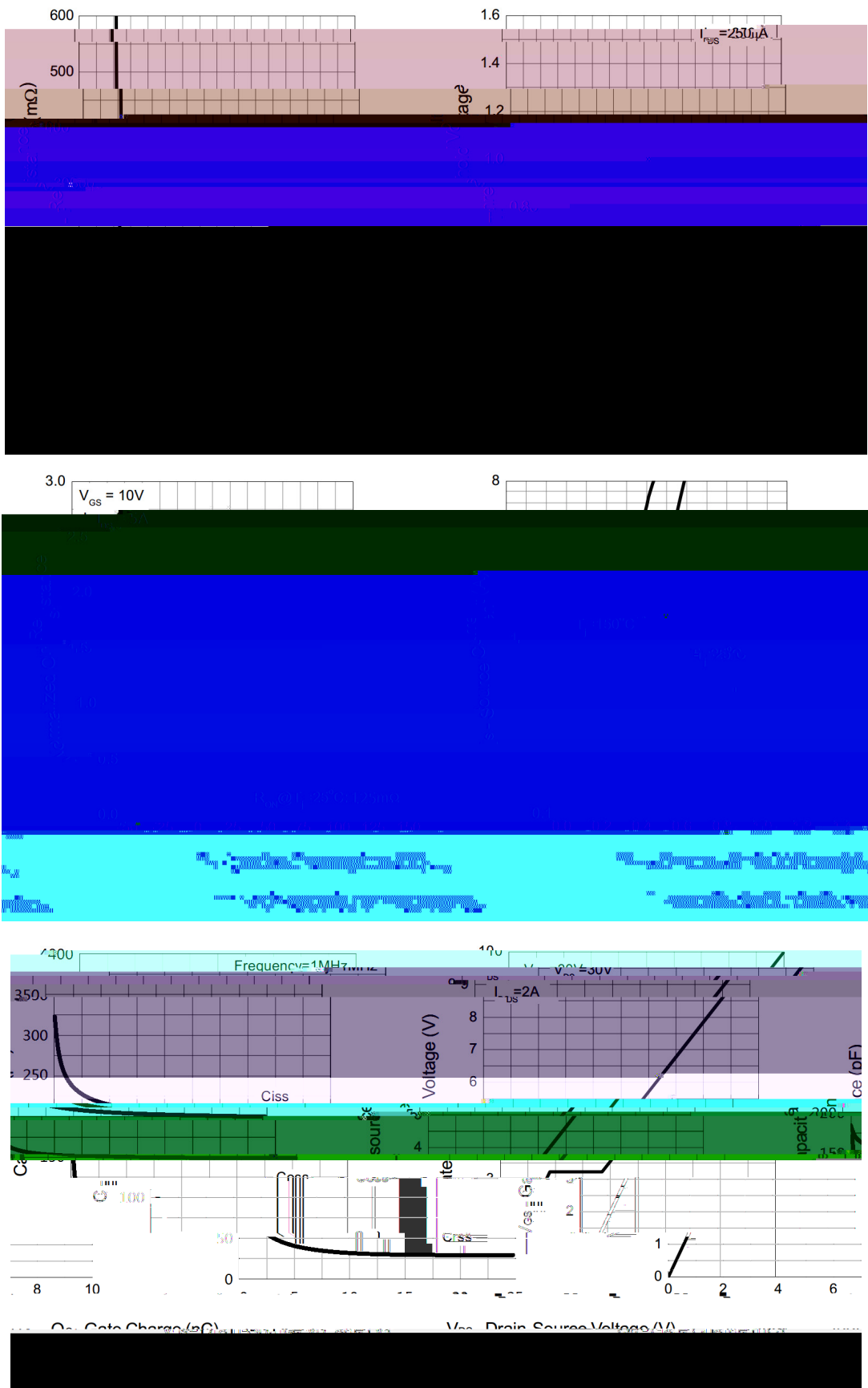
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	100	V
Gate-Source Voltage	V_{GS}	± 20	V
Maximum Drain Current - Continuous	I_D	5.0	A
Drain Current- Pulsed	I_{DM}	15	A
Power Dissipation	P_D	1.55	W
Maximum Junction Temperature	T_J	150	
Storage Temperature Range	T_{STG}	-55 to 150	
Maximum Resistance –Junction to Ambient	$R_{\theta JA}$	80.7	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain–Source Breakdown Voltage	BV_{DS}	$V_{GS}=0V$ $I_{DS}=250\mu A$	100			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=100V$ $V_{GS}=0V$			1	μA
Gate–Body Leakage.	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 10	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_{DS}=250\mu A$	1		3	V
Static Drain–Source On–Resistance	$R_{DS(on)(1)}$	$V_{GS}=10V$ $I_D=5A$		120	175	m Ω
	$R_{DS(on)(2)}$	$V_{GS}=4.5V$ $I_D=2A$		150	235	m Ω
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$ $I_F=1A$			1.3	V
Input Capacitance	C_{iss}	V_{DS}				

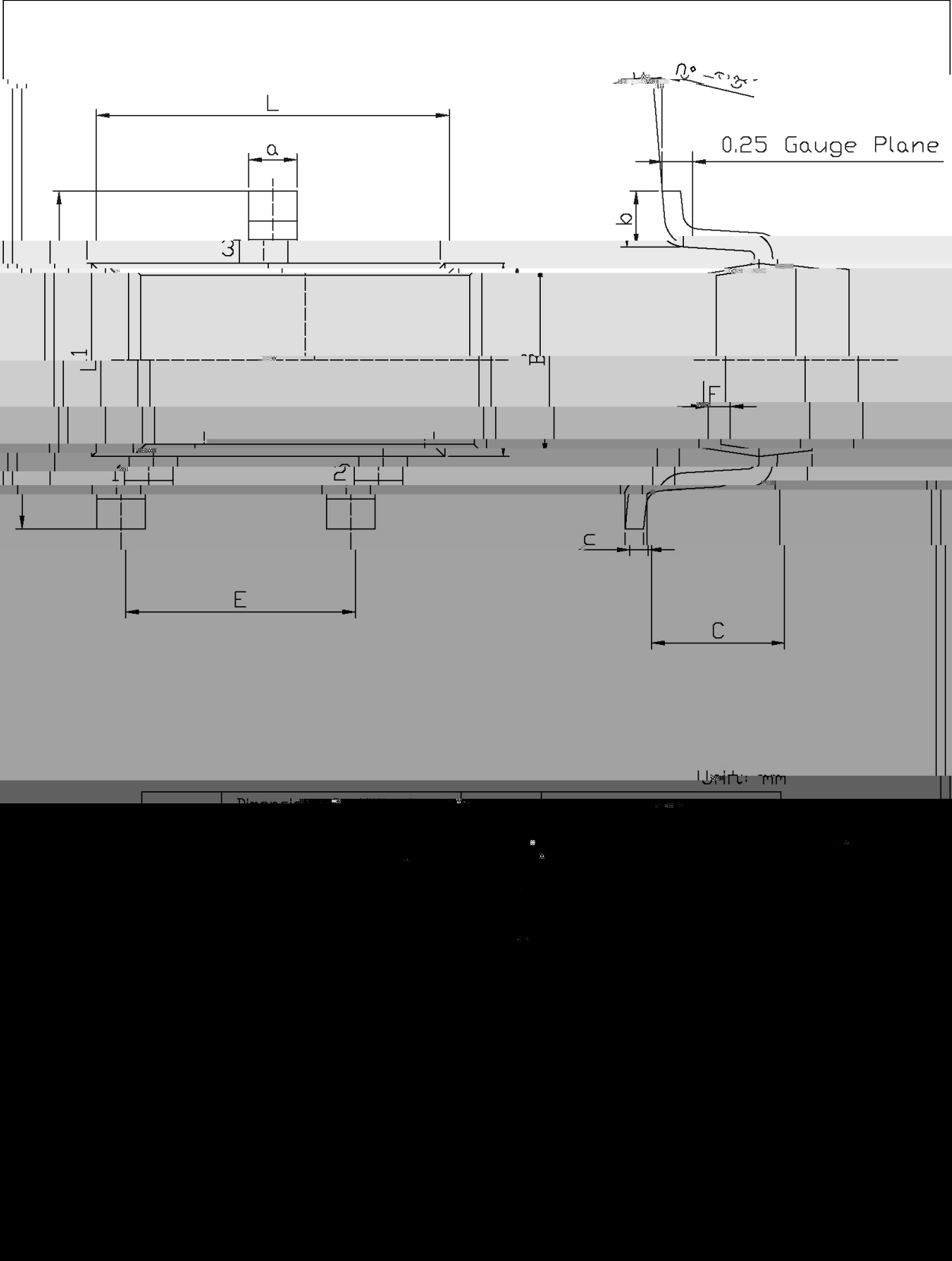
/ Electrical Characteristic Curve



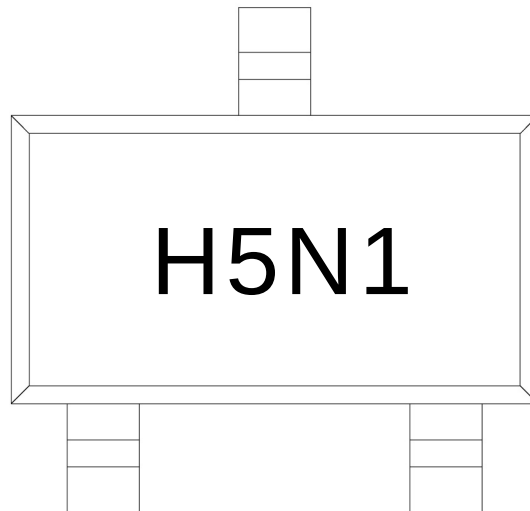
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



H:

5N1

Note:

H Company Code

5N1: Product Type Code

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- 1

150 180

60 90sec;
- 2

245±5

5±0.5sec;
- 3

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.

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units	Dimension	(unit mm ³)
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