

BRCS100N10SDP

Rev.A Jun.-2024

/ Descriptions

TO-252 N

N-CHANNEL MOSFET in a TO-252 Plastic Package.

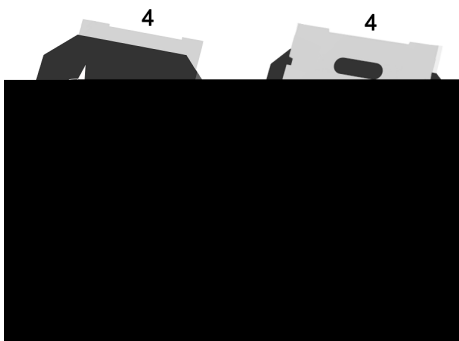
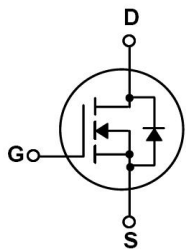
$V_{DS}=100V$ $I_D=60A$

$R_{DS(ON)}@10V \leq 10m\Omega$ (Typ.9m Ω)

$R_{DS(ON)}@4.5V \leq 15m\Omega$ (Typ.11m Ω)

HF Product.

High Frequency Switching and Synchronous Rectification.



PIN1 G

PIN 2 D

PIN 3 S

PIN 4 D

/ Marking

See Marking Instructions.

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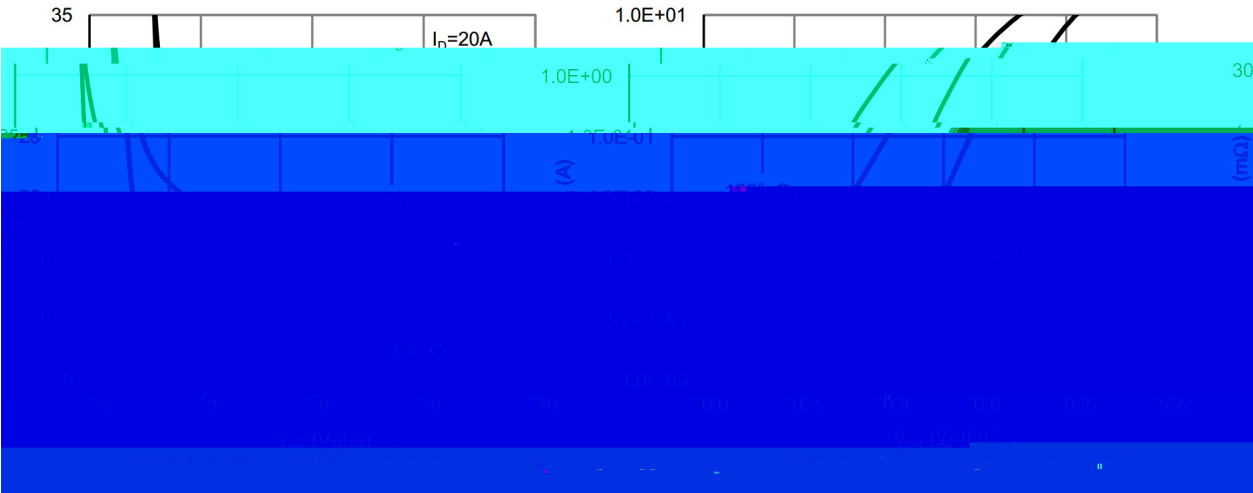
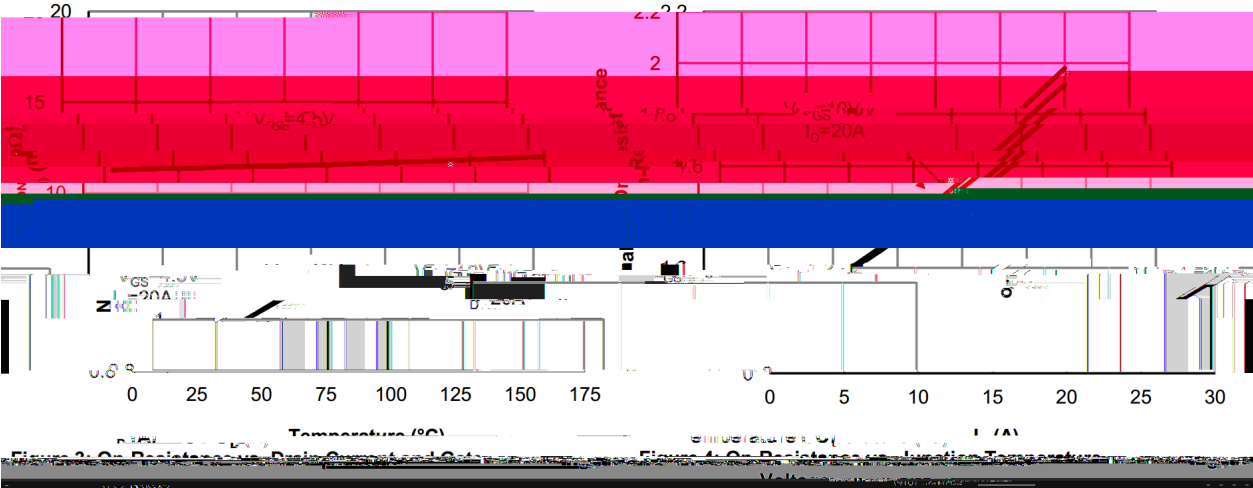
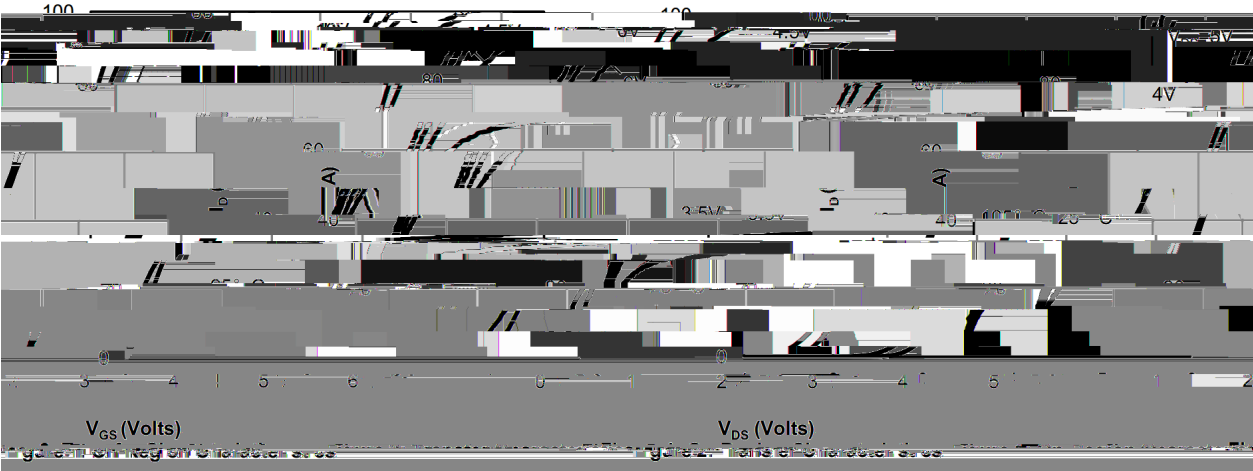


蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=50V$ $R_L=2.5\Omega$ $R_{GEN}=3\Omega$		8.7		ns
Turn-On Rise Time	t_r			3.5		
Turn-Off Delay Time	$t_{d(off)}$			25		
Turn-Off Fall Time	t_f			4.2		

/ Electrical Characteristic Curve



Electrical Characteristic Curve

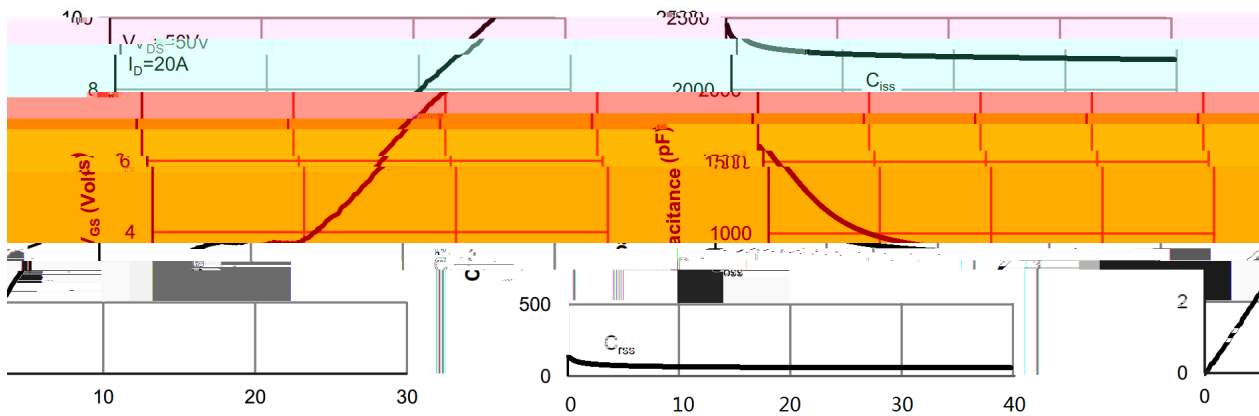


Figure 7: Gate Charge Characteristics

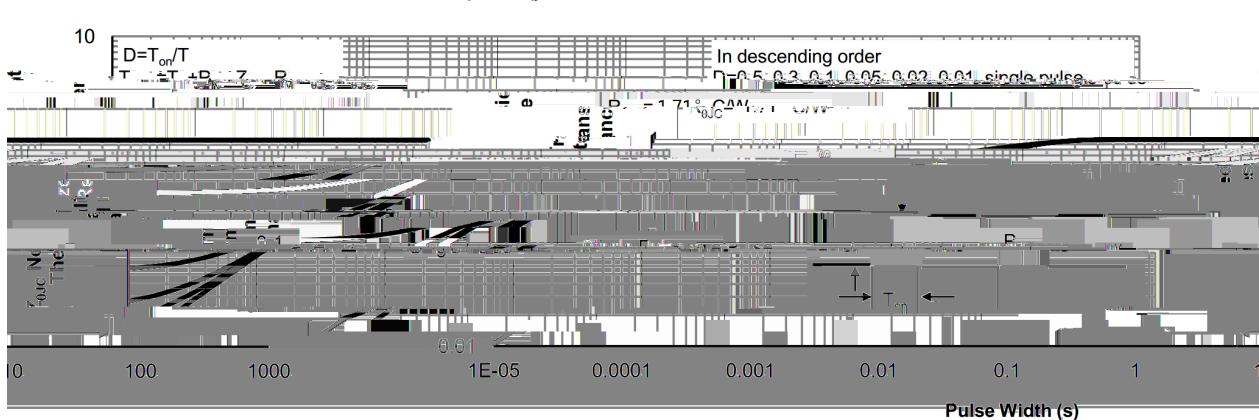
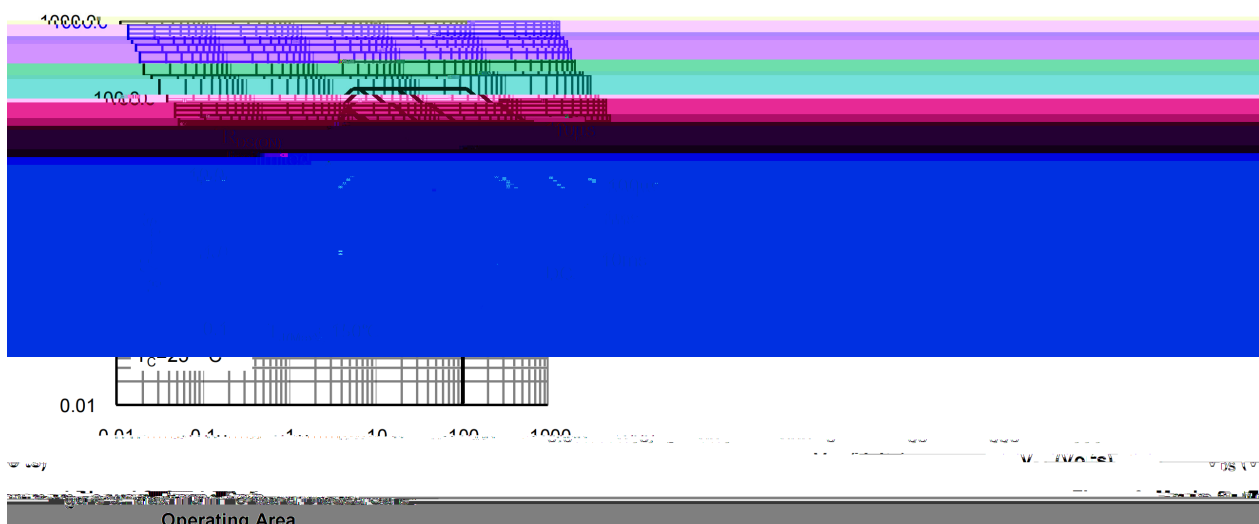
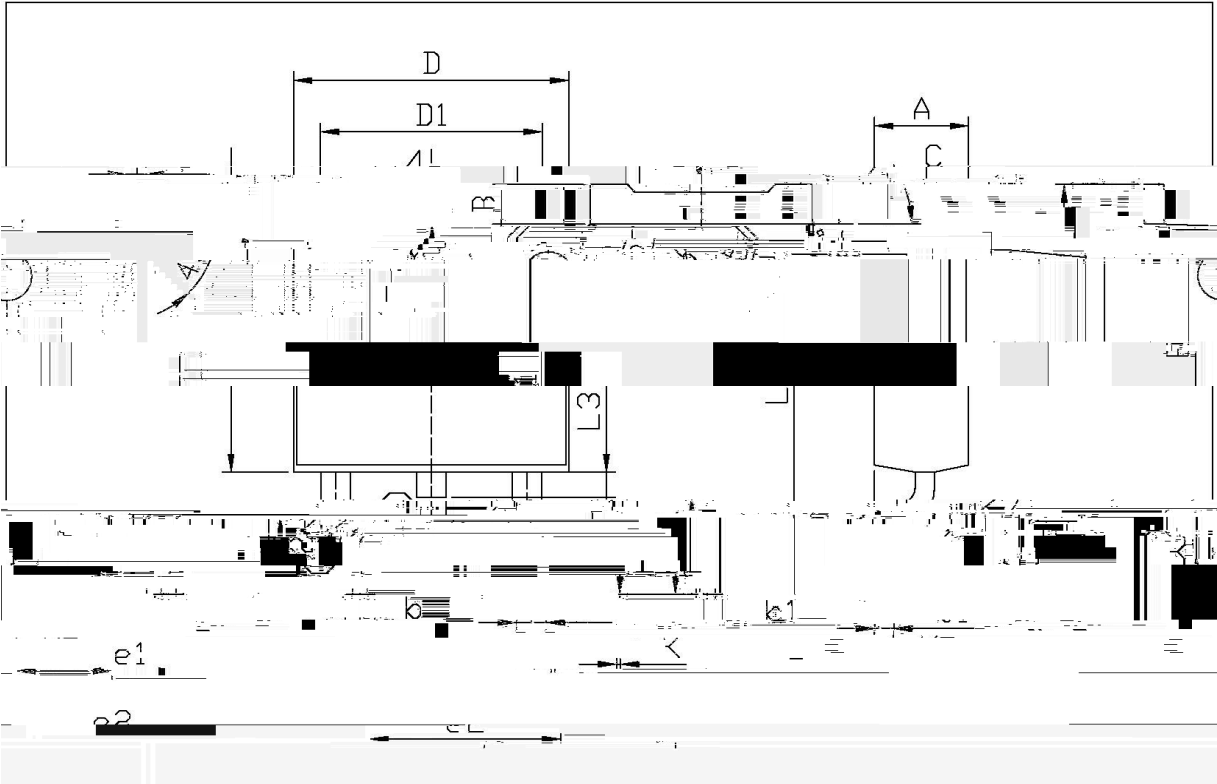


Figure 10: Normalized Maximum Transient Thermal Impedance

/ Package Dimensions

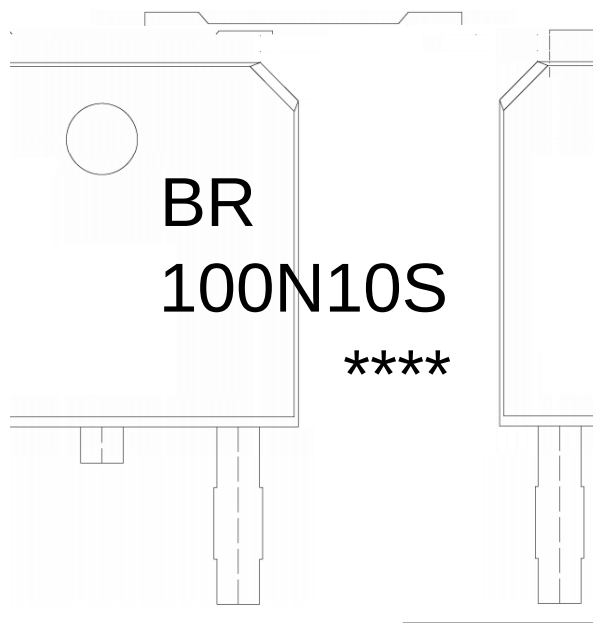


单位: mm

Dimensions, Millimeters		Dimensions, In Millimeters			
Min	Max	Min	Max		
B	0.95	1.25	e1	2.24	2.34
C	0.70	0.80	e2	4.73	4.73
D	0.45	0.55	L1	0.95	1.35
D1	0.45	0.55	L3	0.55	0.70
L1	0.00	0.10	L3	0.65	0.75
L3	0.00	0.10	K	6.75	7.30
L1	0.00	0.10	CL	1.27	1.27
L3	0.00	0.10	CL	6.50	6.50

T0-252

/ Marking Instructions



BR

100N10S

Note:

BR: Company Code

100N10S: Product Type Code

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

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

- 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.

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ REEL