

BRS2N60

Rev.B Mar.-2024



蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

TO-92 N MOS

N-CHANNEL MOSFET in a TO-92 Plastic Package.

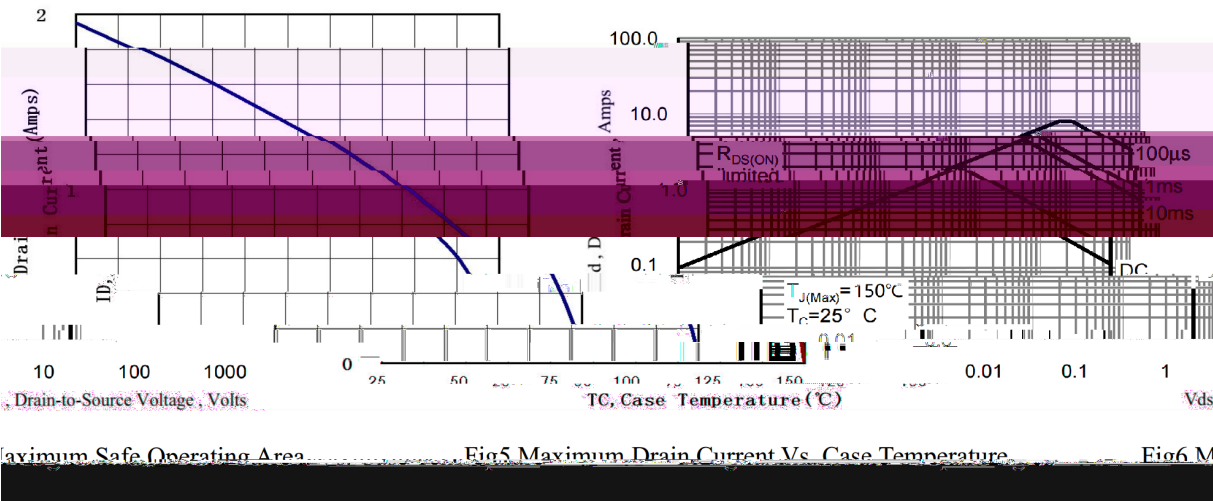
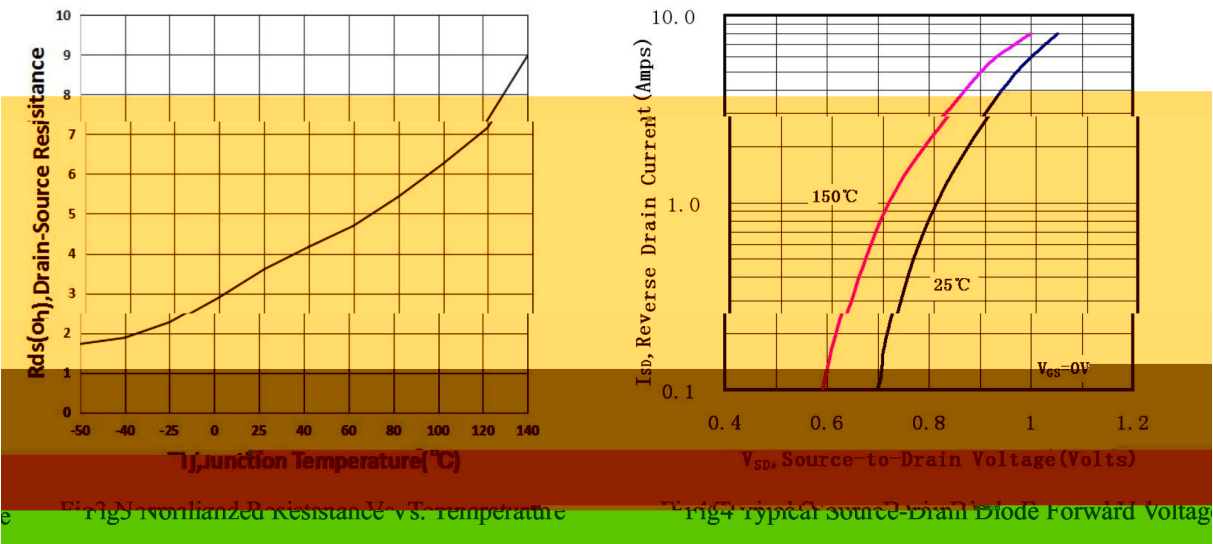
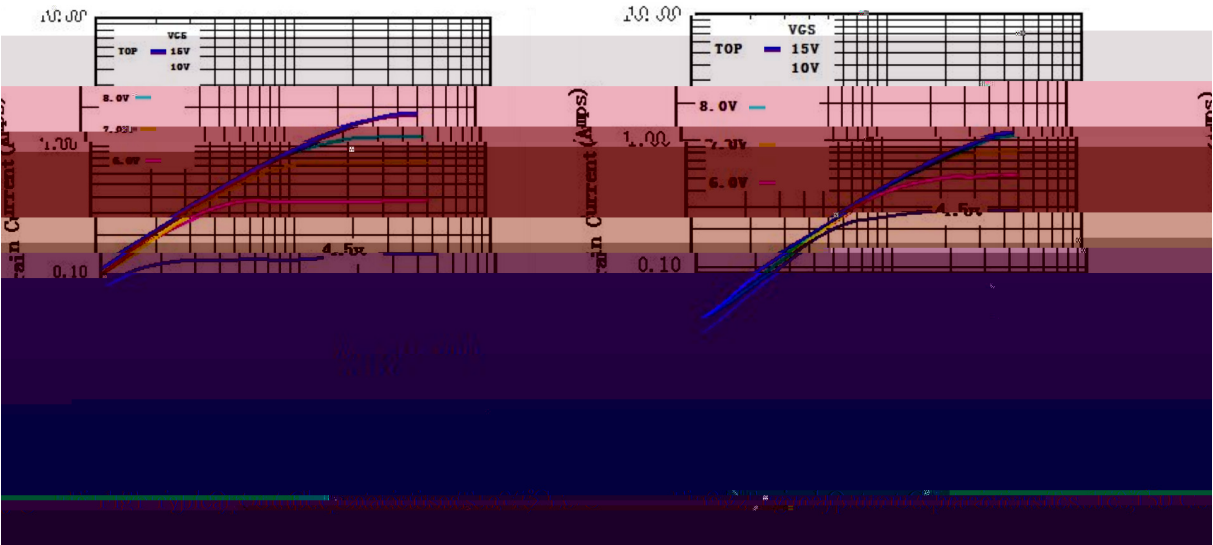
Low gate charge, low c_{rss} , fast switching.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	600	V
Drain Current – Continuous	$I_D(T_c=25^\circ\text{C})$	2.0	A
Drain Current - Pulsed	I_{DM}	8.0	A
Gate-Source Voltage	V_{GS}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	120	mJ
Avalanche Current	I_{AR}	2.0	A
Power Dissipation	P_D	3.5	W
Junction Storage Temperature Range	T_J, T_{STG}	-55 to 150	
Thermal Resistance Junction-case	R_{thJC}	35.7	$^\circ\text{C/W}$
Thermal Resistance Junction-ambient	R_{thJA}	200	$^\circ\text{C/W}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DS}	$V_{GS}=0V$ $I_D=250\mu A$	600			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=600V$ $V_{GS}=0V$			10	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 30V$ $V_{DS}=0V$			± 0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	2.0		4.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=1.0A$		4.0	5.0	Ω
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$ $I_S=2.0A$			1.4	V
Input Capacitance	C_{iss}	$V_{DS}=25V$ $V_{GS}=0V$ $f=1.0MHz$		278		pF

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	Qg	$I_D = 2.0A$, $V_{DS} = 480V$ $V_{GS} = 10V$		6.6		nC
Gate-to-Source Charge	Qgs			1.4		nC
Gate-to-Drain Charge	Qgd			2.0		nC
Continuous Diode Forward Current	Is				2.0	A

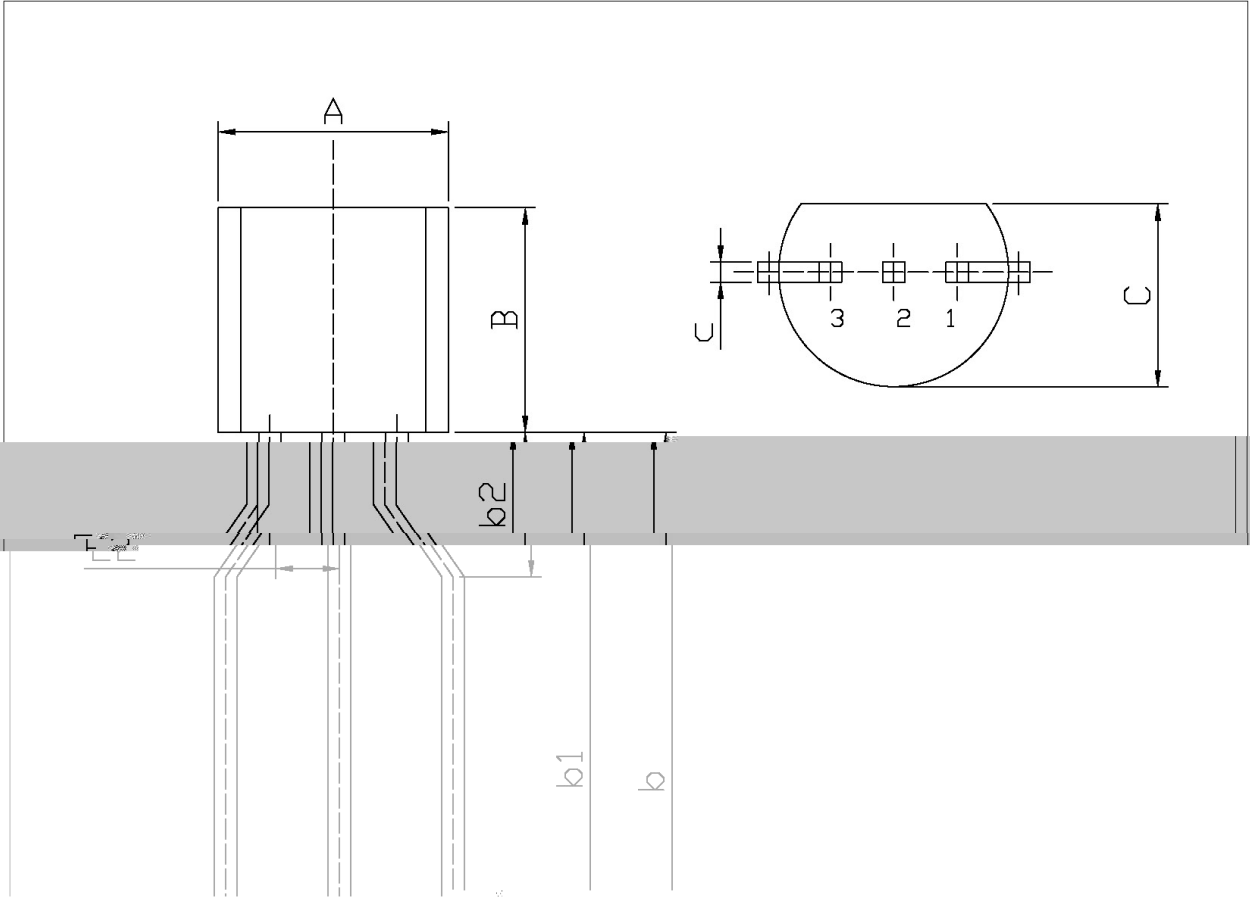
/ Electrical Characteristic Curve



/ Package Dimensions

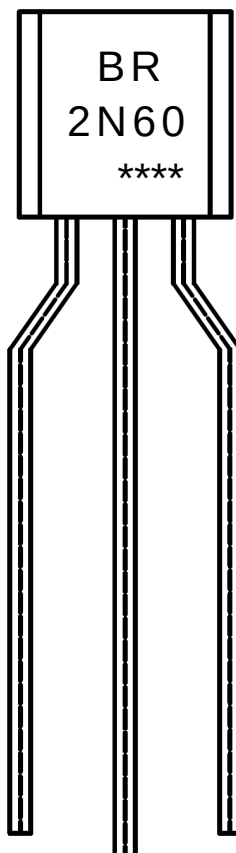
T0-92

Unit:mm



2.8	C	0.30	0.50	E	2.4
2.8	A	4.40	4.80	E1	2.4
1.32	B	4.30	4.70	E2	1.22
0.60	b	13	15	a	0.40
	b1	12.5	14.5		

/ Marking Instructions



BR

2N60

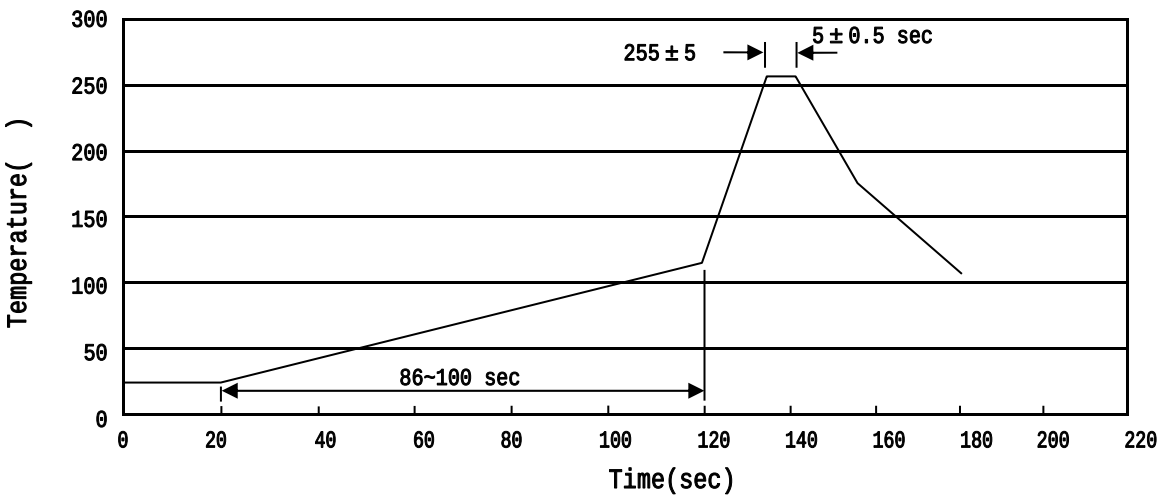
Note:

BR: Company Code

2N60: Product Type Code

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

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- 1

25 150

60 90sec;

1.Preheating:25~150 , Time:60~90sec.
- 2

255 5

5 0.5sec;

2.Peak Temp.:255 5 , Duration:5 0.5sec.
- 3

2 10

/sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

270 5 10 1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units					Dimension (unit mm3)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195

/ AMMO

Package Type	Units					Dimension (unit mm3)	
	Units/tape /	Tape/Inner Box /	Rows/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Inner Box	Outer Box
TO-92	3,000	1	120	10	30,000	328×230×42	480×346×235

/ Notices