

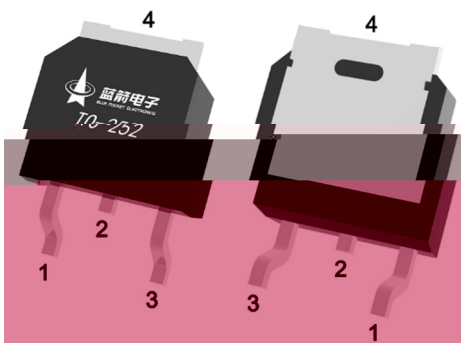
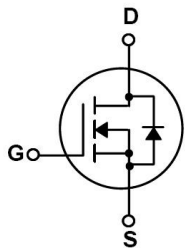
Rev.A Feb.-2024

TO-252 N MOS

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

Low gate charge, low crss, fast switching, HF Product. Have good Electromagnetic Interference performance, HF Product.

These devices are well suited for power switch circuit of adaptor and charger.

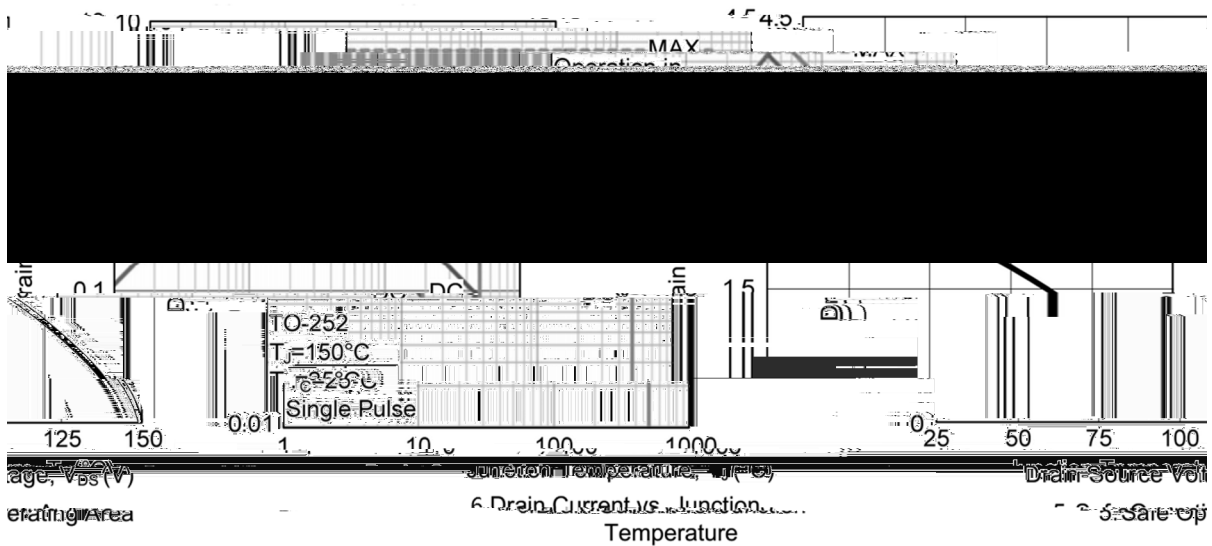
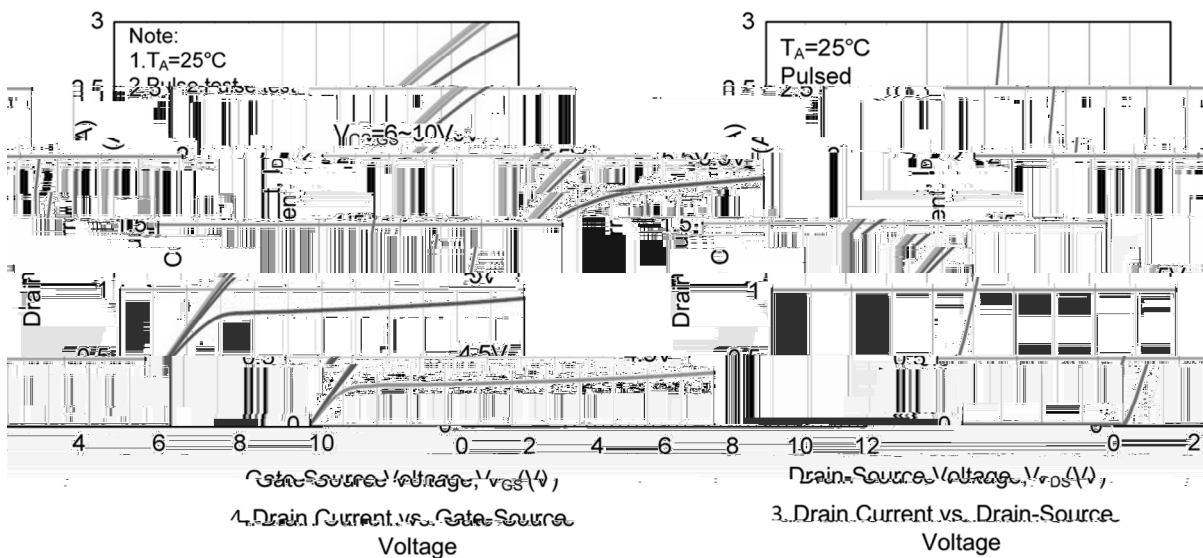
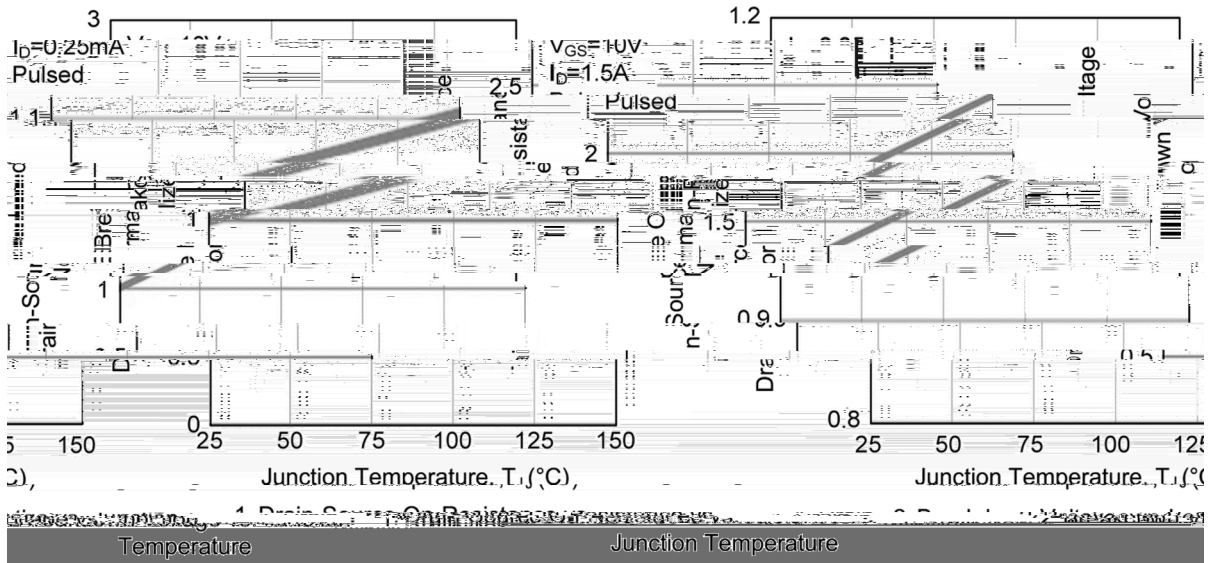


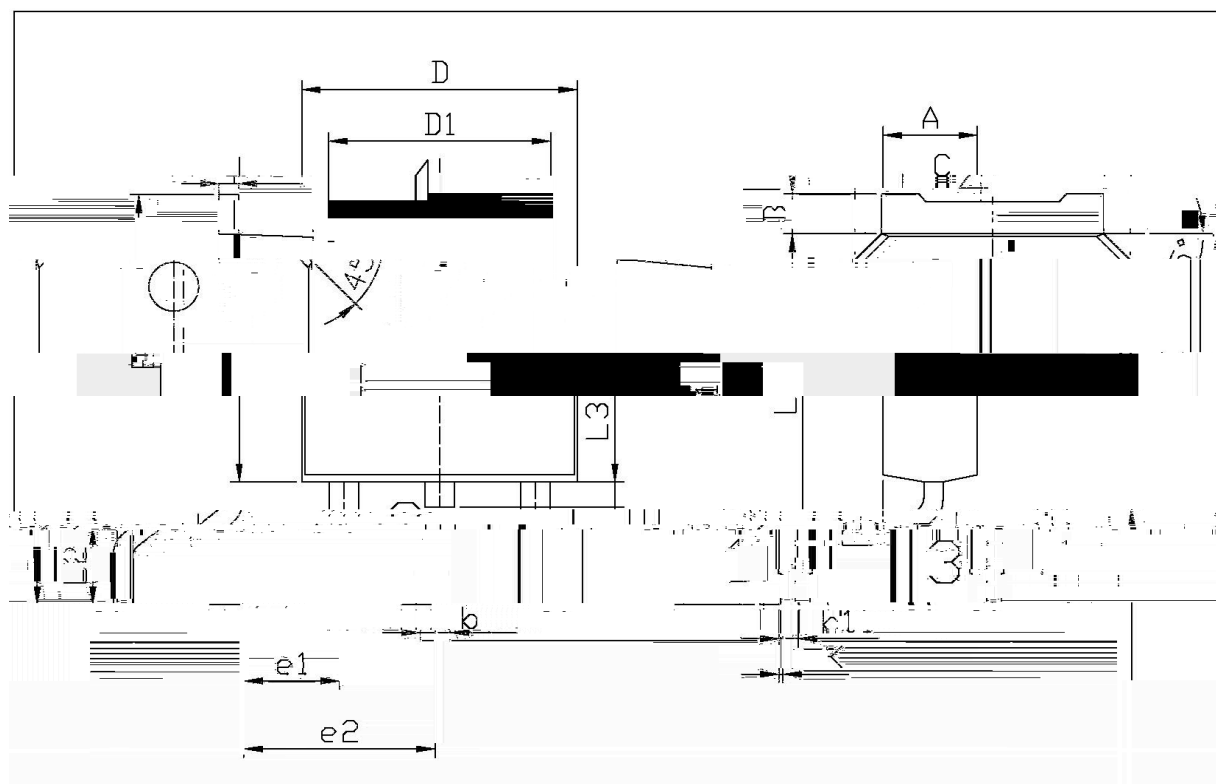
PIN1 G PIN 2 D PIN 3 S PIN 4 D

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	500	V
Drain Current	$I_D(T_c=25^\circ\text{C})$	3	A
Drain Current - Pulsed	I_{DM}	6	A
Gate-Source Voltage	V_{GS}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	97	mJ
Avalanche Current	I_{AS}	4.4	A
Power Dissipation	$P_D(T_c=25^\circ\text{C})$	45	W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	td(on)	V _{DD} =100V I _D =3.0A V _{GS} =10V R _G =25		4		ns
Turn-On Rise Time	tr			15.5		
Turn-Off Delay Time	td(off)			19.3		
Turn-Off Fall Time	tf			22		
Maximum Continuous Drain-Source Diode Forward Current	I _S				3	A
Maximum Pulsed Drain-Source Diode Forward Current	I _{SM}				6	A
Reverse Recovery Time	trr	V _{GS} =0V I _S =3.0A dI _F /dt=100 A/ s		260		ns
Reverse Recovery Charge	Q _{rr}			1		μC



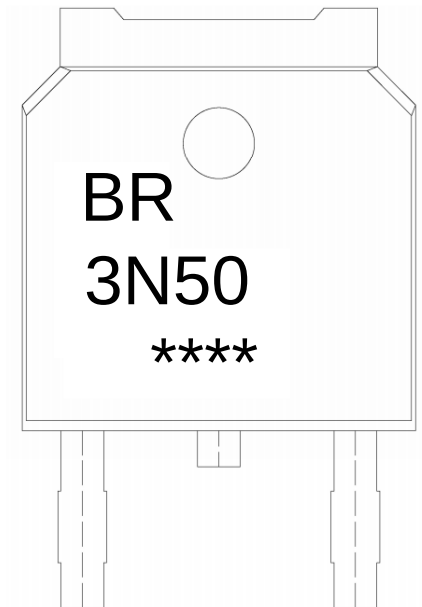


单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
F	5.95	6.95	A	2.20	2.40
B	0.95	1.25	e1	2.24	2.34
b1	0.40	0.75	f1	9.85	10.3
C	1.5	1.55	J2	1.70	2.00
D	0.60	0.90	D	6.45	6.75
D1	6.00	6.70	J1	5.10	5.50

32

T0-25



BR

3N50

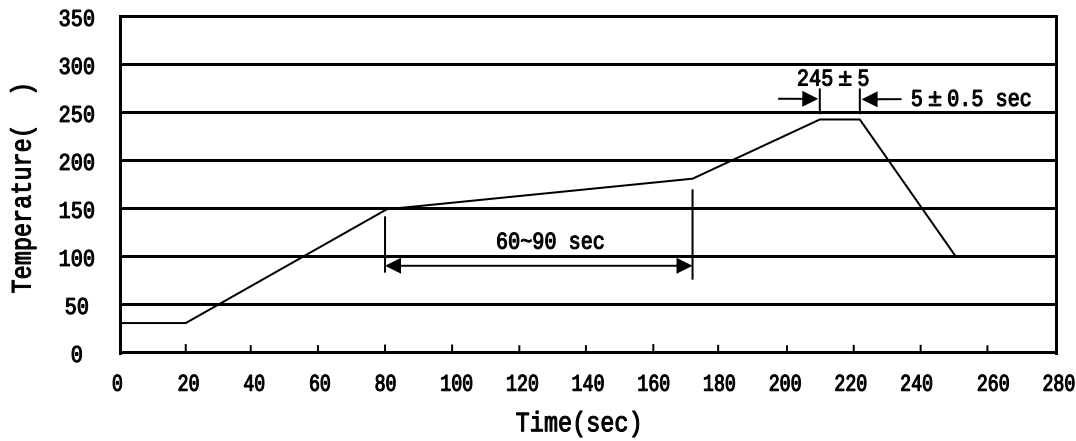
Note:

BR: Company Code

3N50: 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 °C , Time:60~90sec. |
| 2 | 245±5 | | | 5±0.5sec; | 2.Peak Temp.:245±5 °C , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 °C/sec. |

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

/ 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
TO-252	2,500	2	5,000	6	30,000	13 ×16	360×360×50	380×335×366

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180