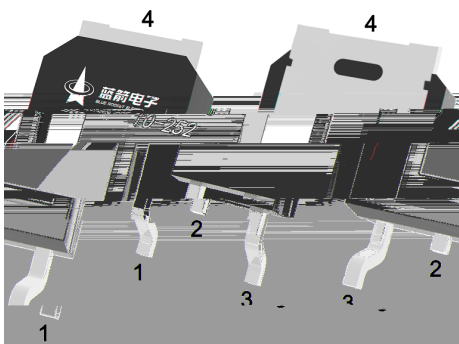
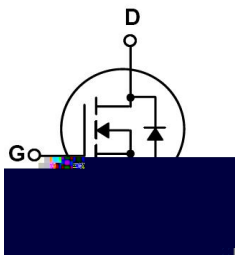


Rev.A Apr.-2024

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

$V_{DS}=500V$ $I_D=5A$
 $R_{DS(ON)}@10V$ 1.7 Ω (Typ. 1.3 Ω)
 Fast Switching.
 HF Product.

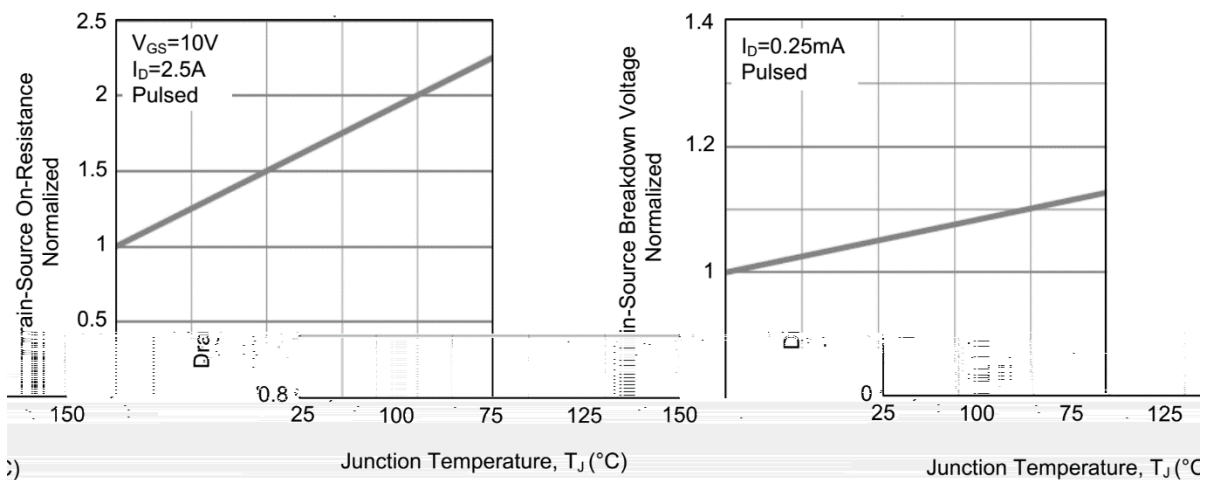
These devices are well suited for power switch circuit of adaptor and charger, intergrate fast recovery diode.



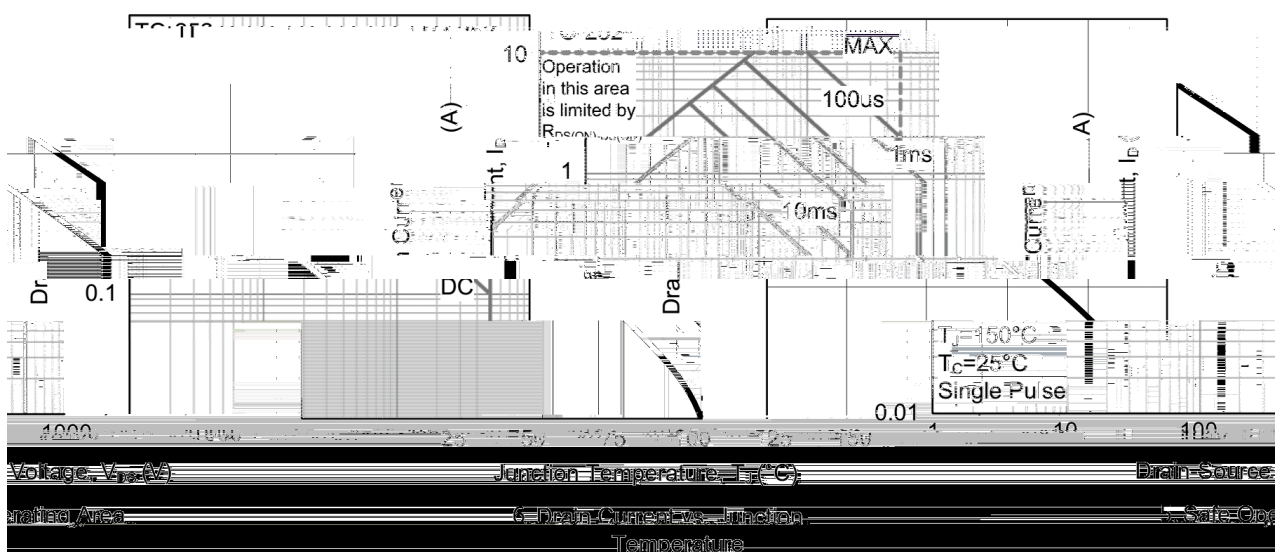
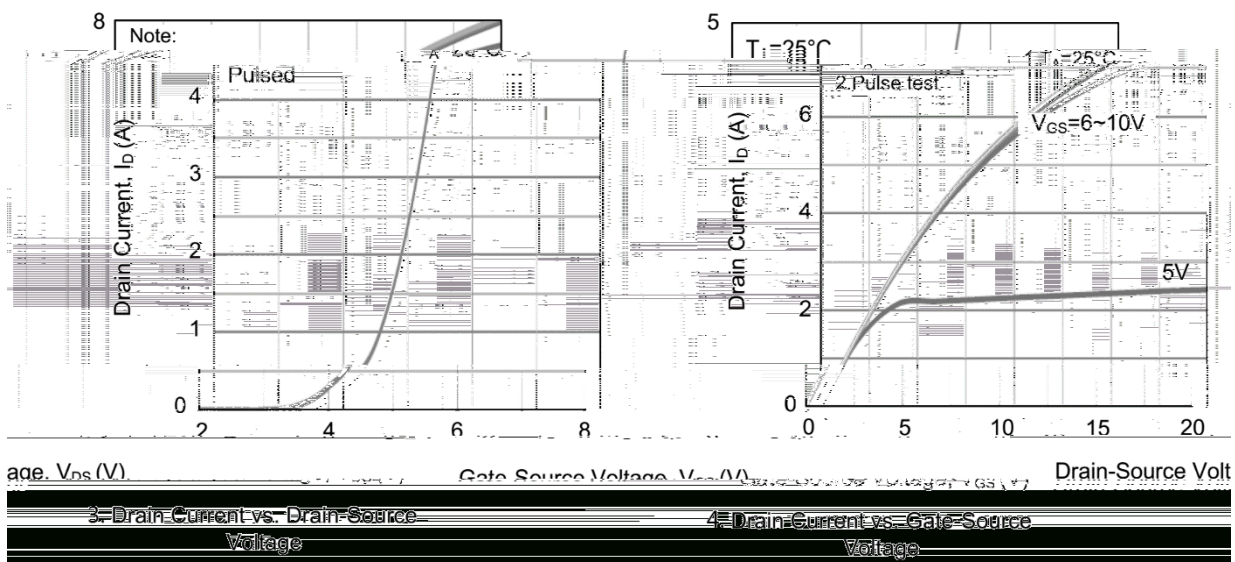
PIN1 G PIN 2 D PIN 3 S PIN 4 D

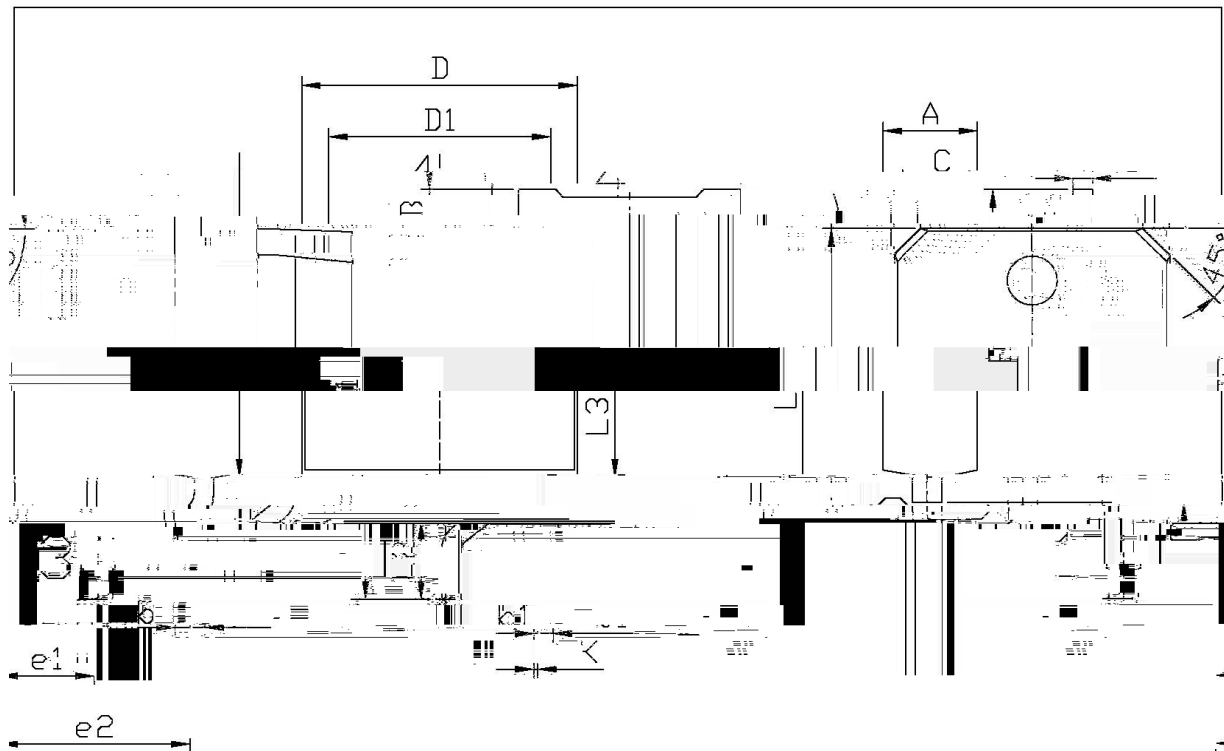
See Marking Instructions.

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=100V$ $I_D=5.0A$ $V_{GS}=10V$ $R_G=25\Omega$		7.5		ns
Turn-On Rise Time	t_r			18		
Turn-Off Delay Time	$t_{d(off)}$			38.6		
Turn-Off Fall Time	t_f			23.4		
Maximum Continuous Drain-Source Diode Forward Current	I_S				5	A
Maximum Pulsed Drain-Source Diode Forward Current	I_{SM}				10	A
Reverse Recovery Time	t_{rr}	$V_{GS}=0V$ $I_S=5.0A$ $dI_F/dt=100 A/\mu s$		95		ns
Reverse Recovery Charge	Q_{rr}			1.75		μC



1. Drain-Source On-Resistance vs. Junction Temperature
2. Breakdown Voltage vs. Junction Temperature

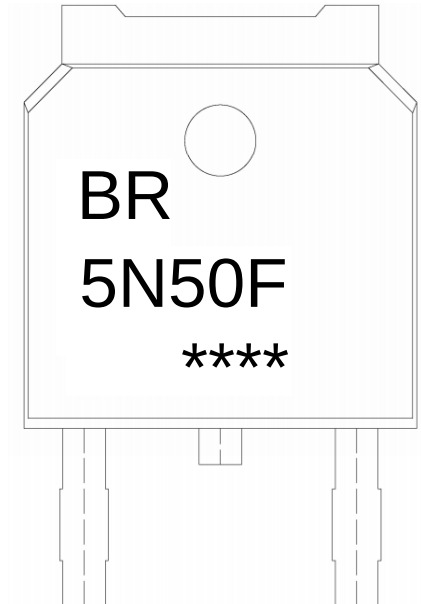




单位: mm

Symbol			Dimensions In Millimeters			Symbol			Dimensions In Millimeters		
			Min	Max	Typ				Min	Max	Typ
5.95			6.25	6.25		2.20			2.40	2.40	
2.24			2.34	2.34		10.95			25	25	
2.15			2.25	2.25		70.75			70.75	70.75	
L1			9.85	10.35		b1			0.45	0.55	
f			0.45	0.55		2.00			2.00	2.00	
0.90			0.90	0.90		D			6.45	6.75	
0.10			0.10	0.10		L3			0.60	0.60	
			D1	5.10		K			0.00	0.00	

TO-252



BR

5N50F

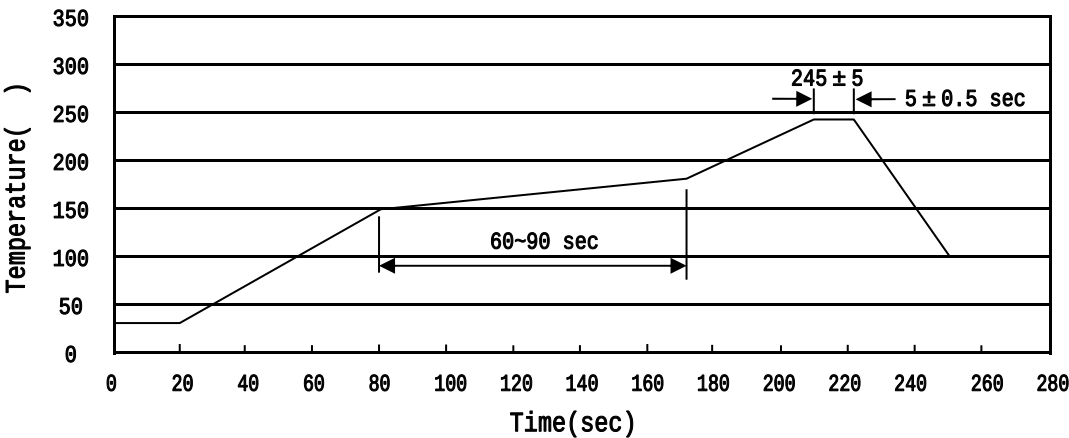
Note:

BR: Company Code

5N50F: 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.

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