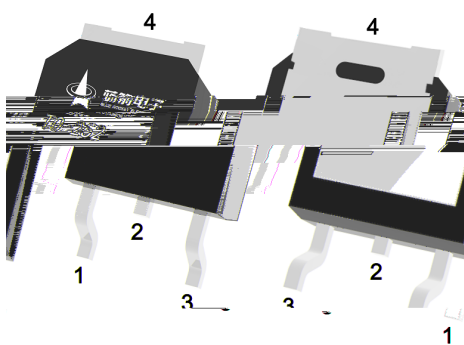
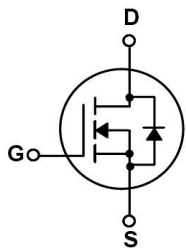


Rev.A Apr.-2024

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

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

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

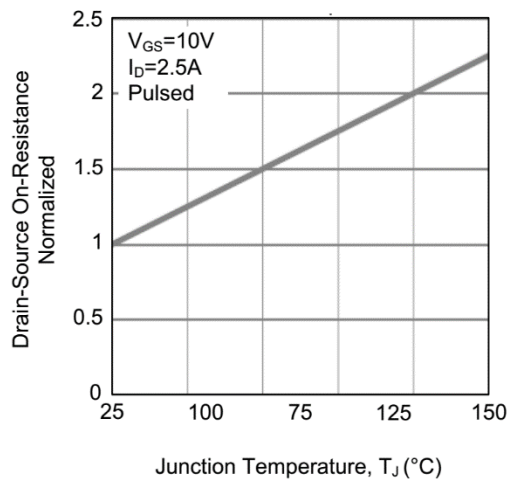


PIN1 G PIN 2 D PIN 3 S PIN 4 D

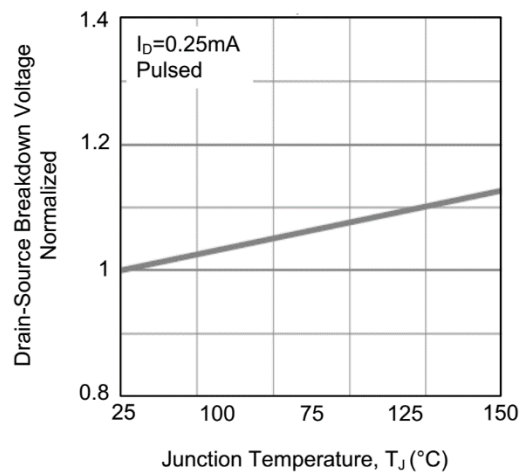
See Marking Instructions.

电性能参数

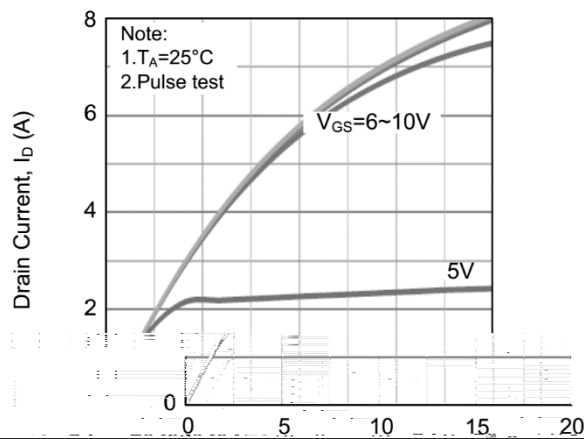
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=100V$ $I_D=5.0A$ $V_{GS}=10V$ $R_G=25\Omega$		7.5		ns
Turn-On Rise Time	t_r			18		
Turn-Off Delay Time	$t_{d(off)}$			38.6		
Turn-Off Fall Time	t_f			23.4		
Maximum Continuous Drain-Source Diode Forward Current	I_S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



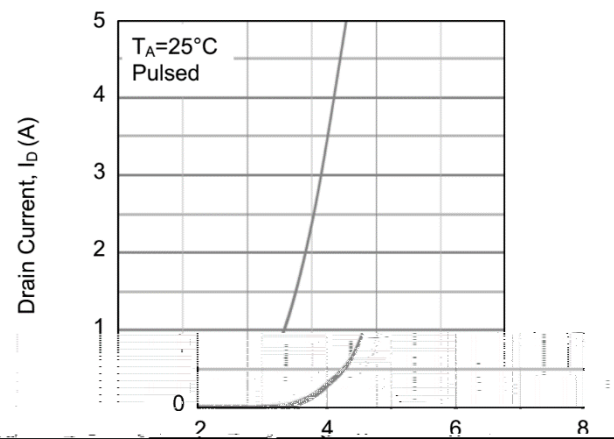
1. Drain-Source On-Resistance vs. Junction Temperature



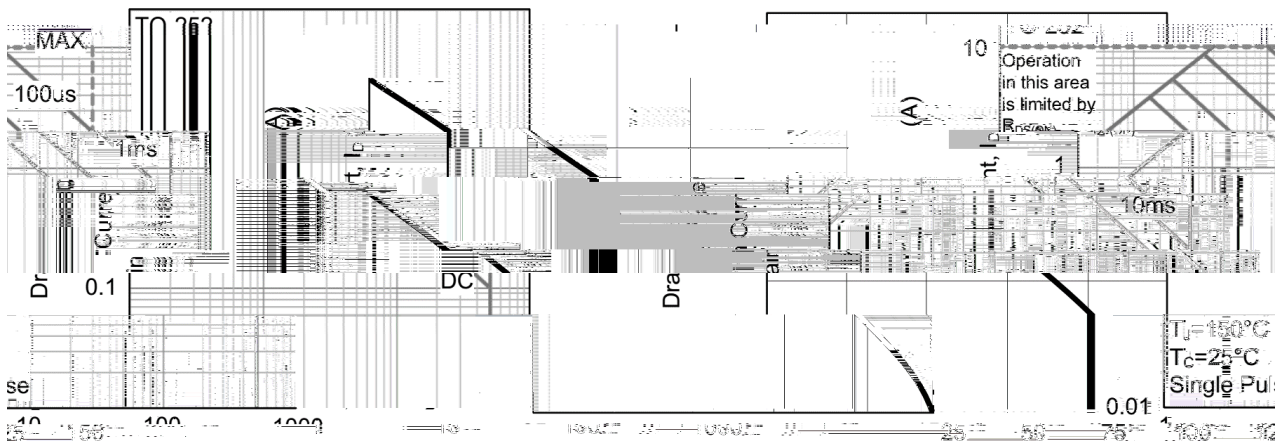
2. Breakdown Voltage vs. Junction Temperature



3-Drain Current vs. Drain-Source Voltage

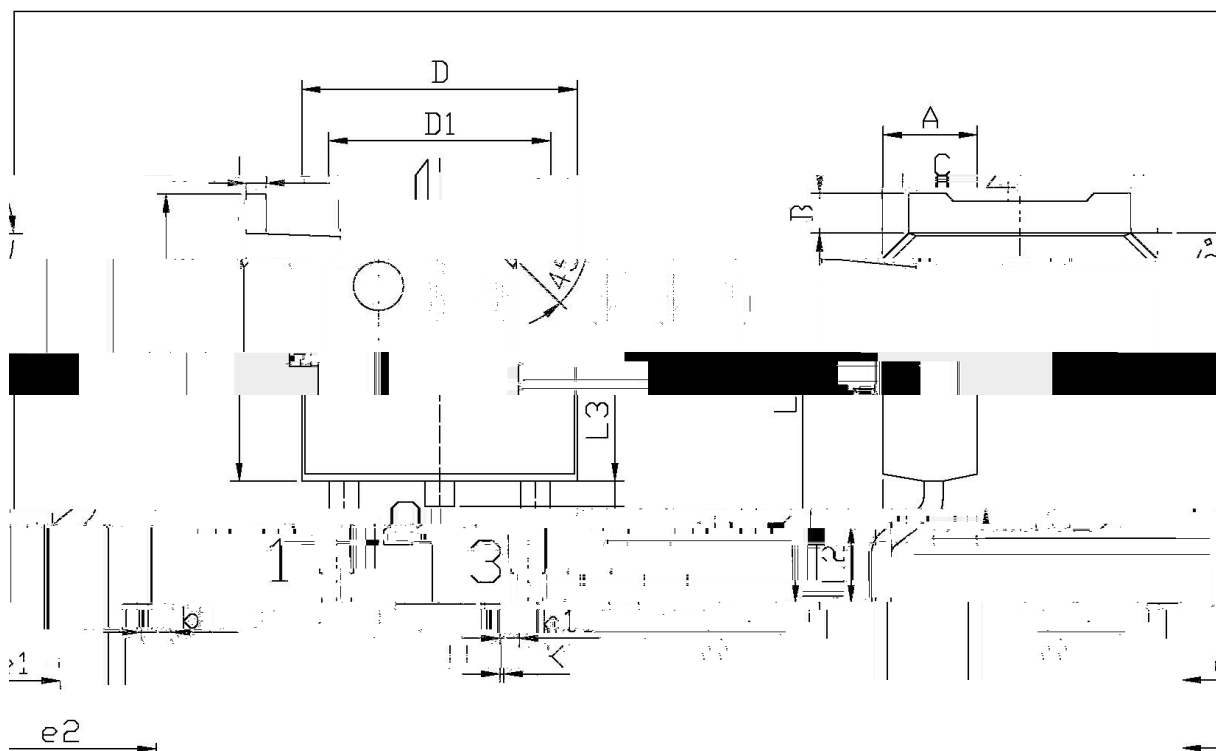


4-Drain Current vs. Gate-Source Voltage



5. Safe Operating Area

6. Drain Current vs. Junction Temperature

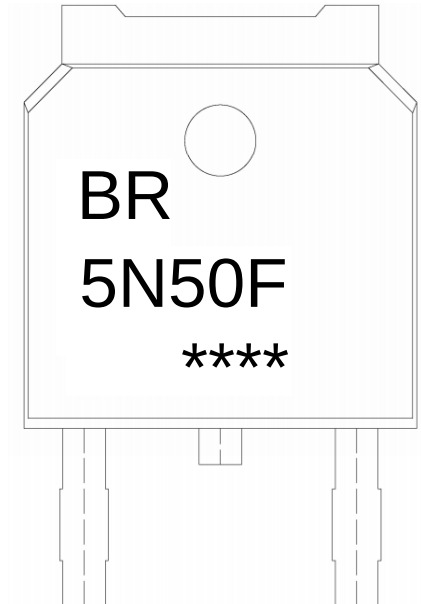


单位: mm

Symbol		Dimensions In Millimeters		Symbol		Dimensions In Millimeters	
		Min	Max			Min	Max
A	5.95	6.25		A	2.20	2.40	
B	2.24	2.34		B	0.95	1.25	
C	1.73	1.83		C	0.70	0.90	
D	10.35	10.55		D	6.45	6.75	
E	10.35	10.55		E	6.45	6.75	
F	10.35	10.55		F	6.45	6.75	
G	10.35	10.55		G	6.45	6.75	
H	10.35	10.55		H	6.45	6.75	
I	10.35	10.55		I	6.45	6.75	
J	10.35	10.55		J	6.45	6.75	
K	10.35	10.55		K	6.45	6.75	
L	10.35	10.55		L	6.45	6.75	
M	10.35	10.55		M	6.45	6.75	
N	10.35	10.55		N	6.45	6.75	
O	10.35	10.55		O	6.45	6.75	
P	10.35	10.55		P	6.45	6.75	
Q	10.35	10.55		Q	6.45	6.75	
R	10.35	10.55		R	6.45	6.75	
S	10.35	10.55		S	6.45	6.75	
T	10.35	10.55		T	6.45	6.75	
U	10.35	10.55		U	6.45	6.75	
V	10.35	10.55		V	6.45	6.75	
W	10.35	10.55		W	6.45	6.75	
X	10.35	10.55		X	6.45	6.75	
Y	10.35	10.55		Y	6.45	6.75	
Z	10.35	10.55		Z	6.45	6.75	

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T0-2



BR

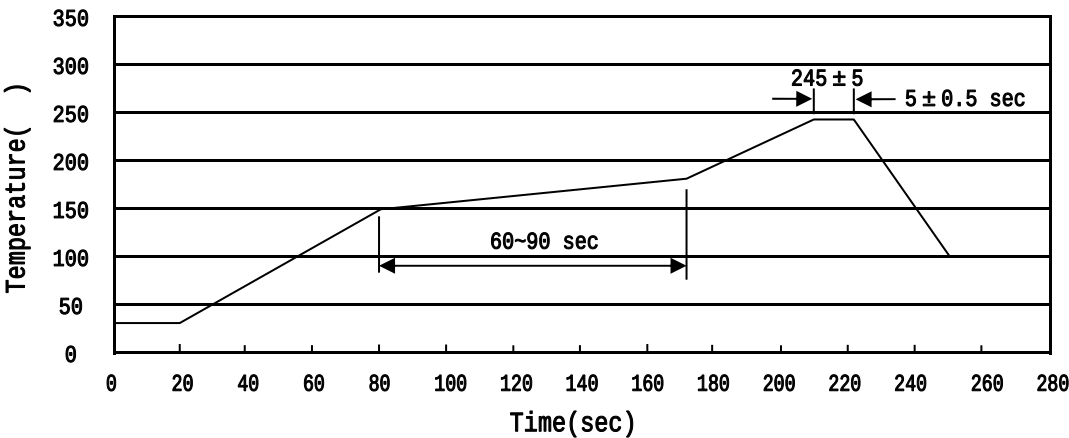
Note:

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