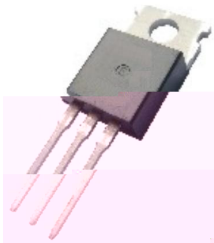
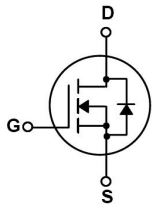


TO-220 N MOS N-CHANNEL MOSFET in a TO-220 Plastic Package.

Fast switching, low on resistance, low gate charge, low reverse transfer capacitances.

Used in various power switching circuit for system miniaturization and higher efficiency.

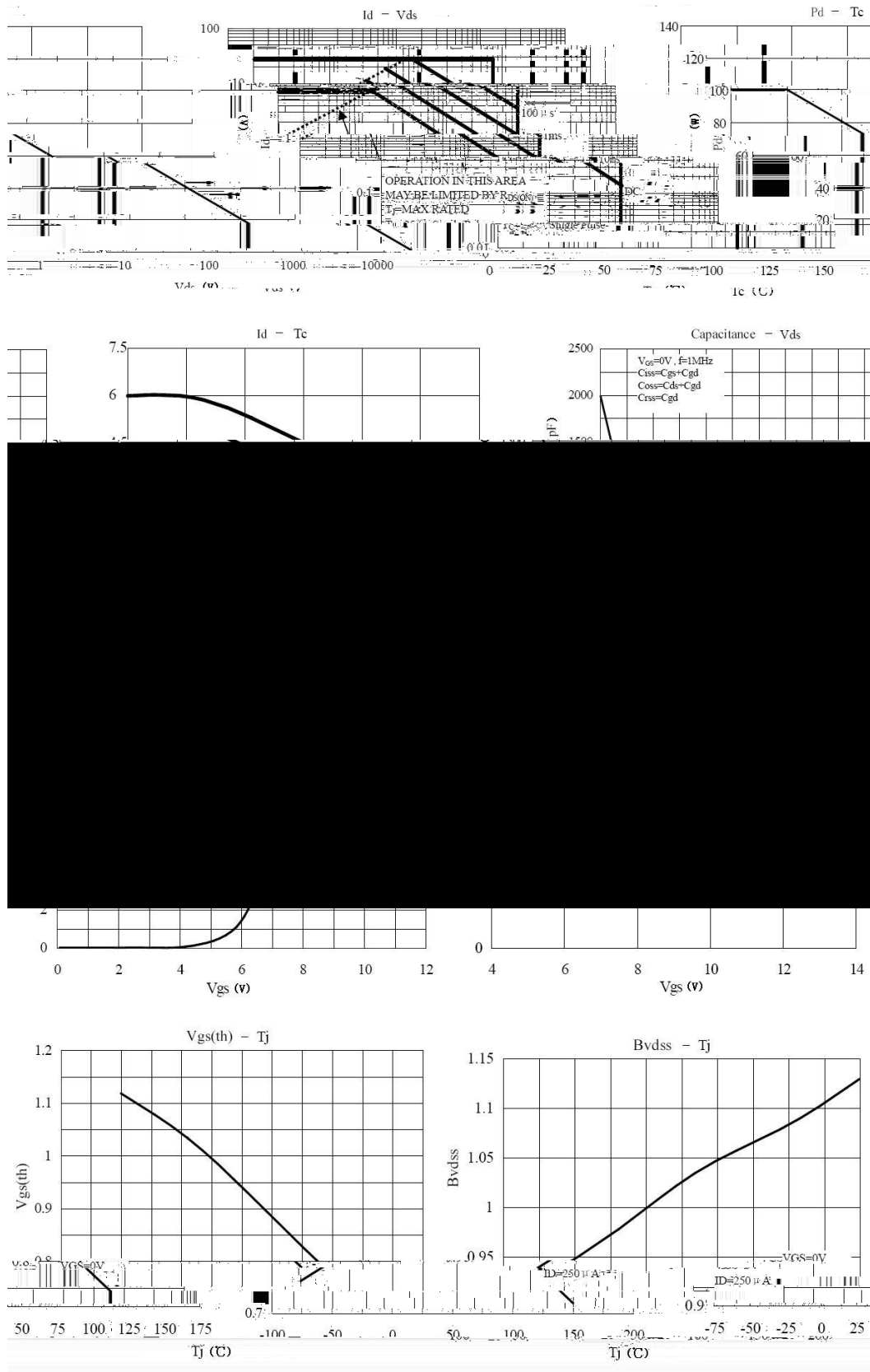


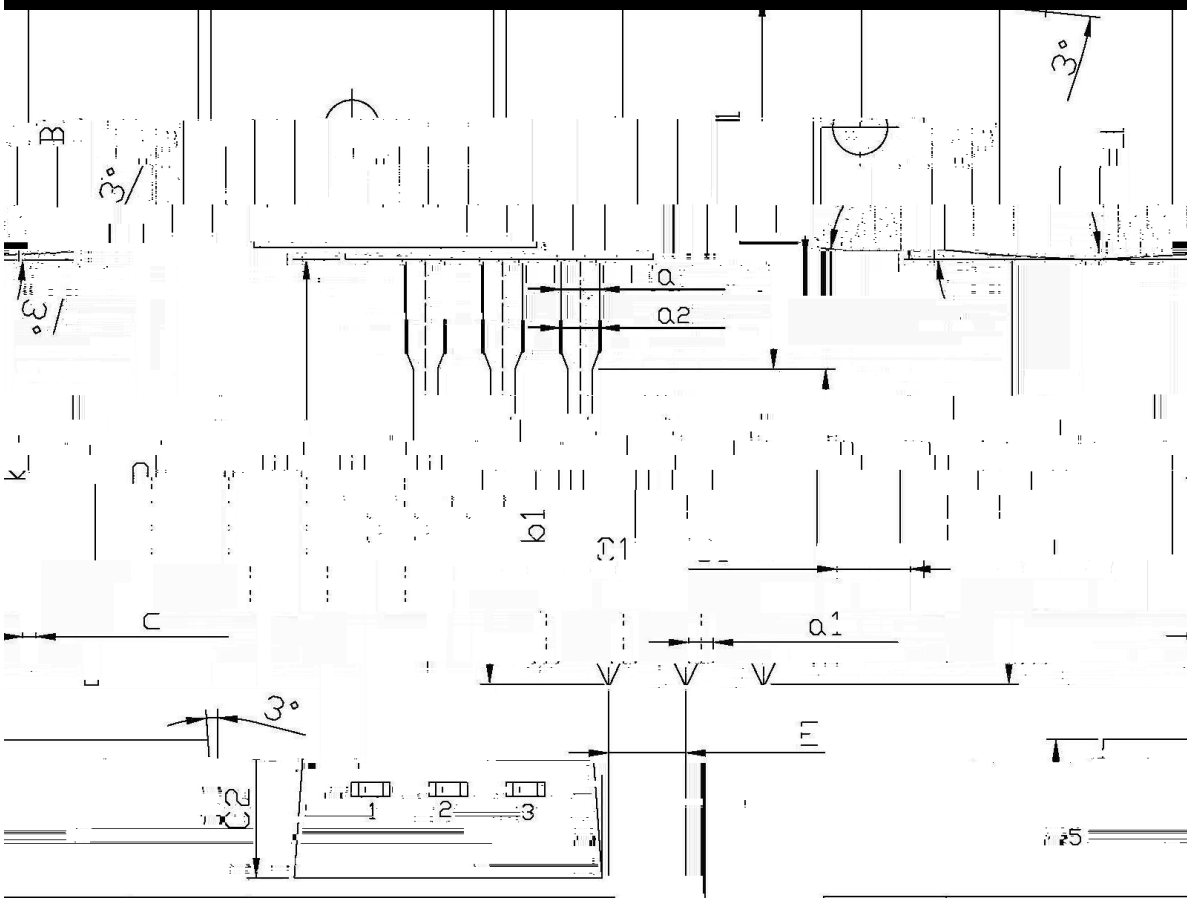
PIN1 G PIN 2 D PIN 3 S

See Marking Instructions.

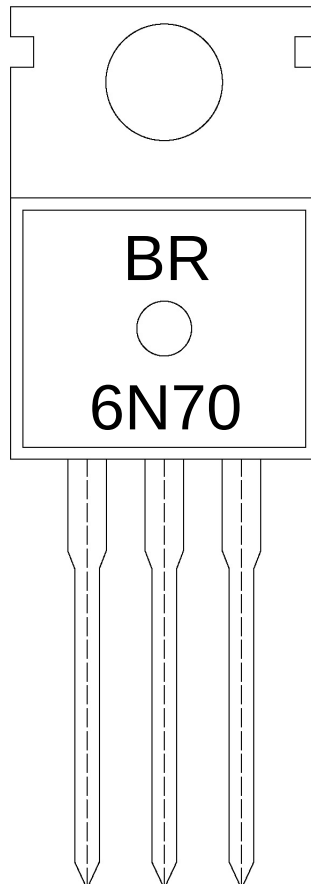
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	700	V
Drain Current	$I_D(T_c=25^\circ\text{C})$	6.0	A
Drain Current	$I_D(T_c=100^\circ\text{C})$	3.6	A
Drain Current - Pulsed	I_{DM}	24	A
Gate-Source Voltage	V_{GS}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	185	mJ
Repetitive Avalanche Energy	E_{AR}	20	mJ
Avalanche Current	I_{AR}	3.3	A
Power Dissipation	$P_D(T_c=25^\circ\text{C})$	100	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	
Junction-to-Case	$R_{\theta JC}$	1.25	/W
Junction-to-Ambient	$R_{\theta JA}$	62	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DS}	$V_{GS}=0V$ $I_D=250\mu A$	700			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=700V$ $V_{GS}=0V$			1	μA
		$V_{DS}=560V$ $T_a=125^\circ\text{C}$			100	μA
Gate-Body Leakage Current, Forward	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 10	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	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=3.0A$		1.35	1.6	Ω
Forward Transconductance	g_{FS}	$V_{DS}=15V$ $I_D=3.0A$		5.0		S
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$ $I_S=6.0A$			1.5	V
Input Capacitance	C_{iss}	$V_{DS}=25V$ $V_{GS}=0V$ $f=1.0MHz$		938		pF
Output Capacitance	C_{oss}			87.8		pF
Reverse Transfer Capacitance	C_{rss}			8.2		pF
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=350V$ $I_D=6.0A$ $R_G=25\Omega$ $V_{GS}=10V$		14.7		ns
Turn-On Rise Time	t_r			26		ns
Turn-Off Delay Time	$t_{d(off)}$			68.4		ns
Turn-Off Fall Time	t_f			34.6		ns





Dimensions in Millimeters			Dimensions in Millimeters		
Symbol	Min	Max	Symbol	Min	Max
Δ	9.8	10.2	C	1.2	1.4
δ	3.56	3.64	D	6.3	6.7
ℓ	15.7	16.1	B1	9.0	9.4
ℓ_b	12.6	13.6	C1	2.2	2.6
b_1	9.6	10.6	a_1	0.7	0.9
ϕ	3.0	3.2	ϕ	1.32	1.4
ϕ_1	4.3	4.7	ϕ_1	2.34	2.74
			ϕ_2	1.25	1.45



BR

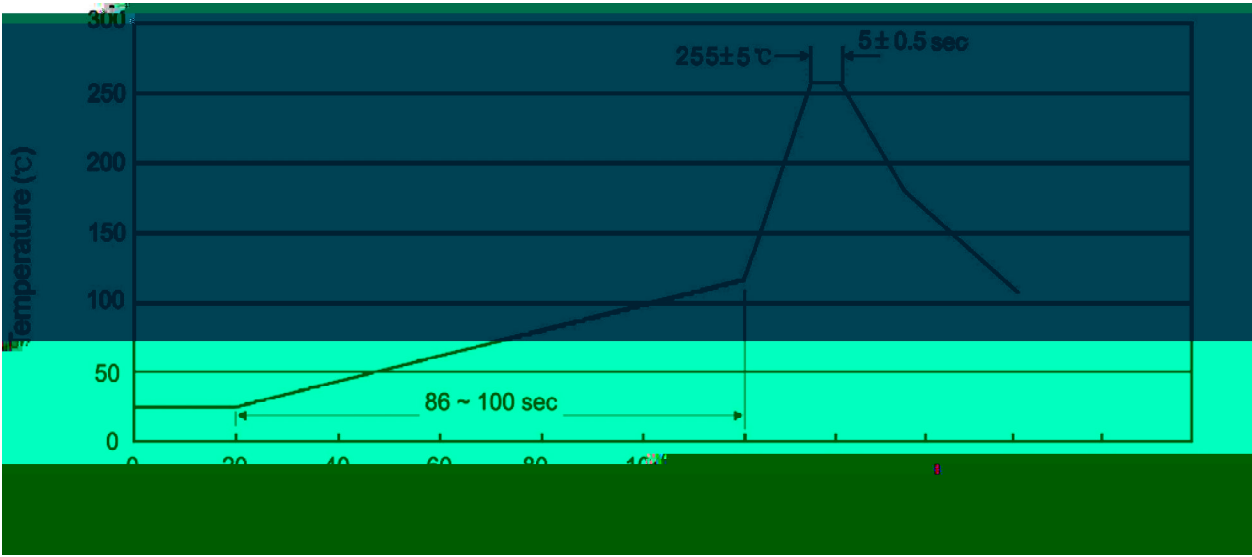
9Q : 3

Note:

BR: Company Code

6N70: Product Type.

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



Note:

- 1

25 150%

60 90sec;
- 2

255[±]5%

5[±]0.5sec;
- 3

2 10%/sec.
- 1.Preheating:25~150%, Time:60~90sec.

2.Peak Temp.:255[±]5%, Duration:5[±]0.5sec.

3. Cooling Speed: 2~10%/sec.

270[±]5%

10[±]1 sec.

Temp.:270±5

Time:10±1 sec

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只袋	袋盒	只盒	盒箱	只箱	袋	盒	箱