

/ Descriptions

TO-251 N MOS N-CHANNEL MOSFET in a TO-251 Plastic Package.

/ Features

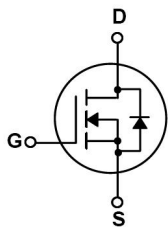
Low gate charge, low crss, fast switching.

/ Applications

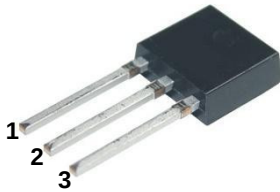
DC/DC

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2 D PIN 3 S

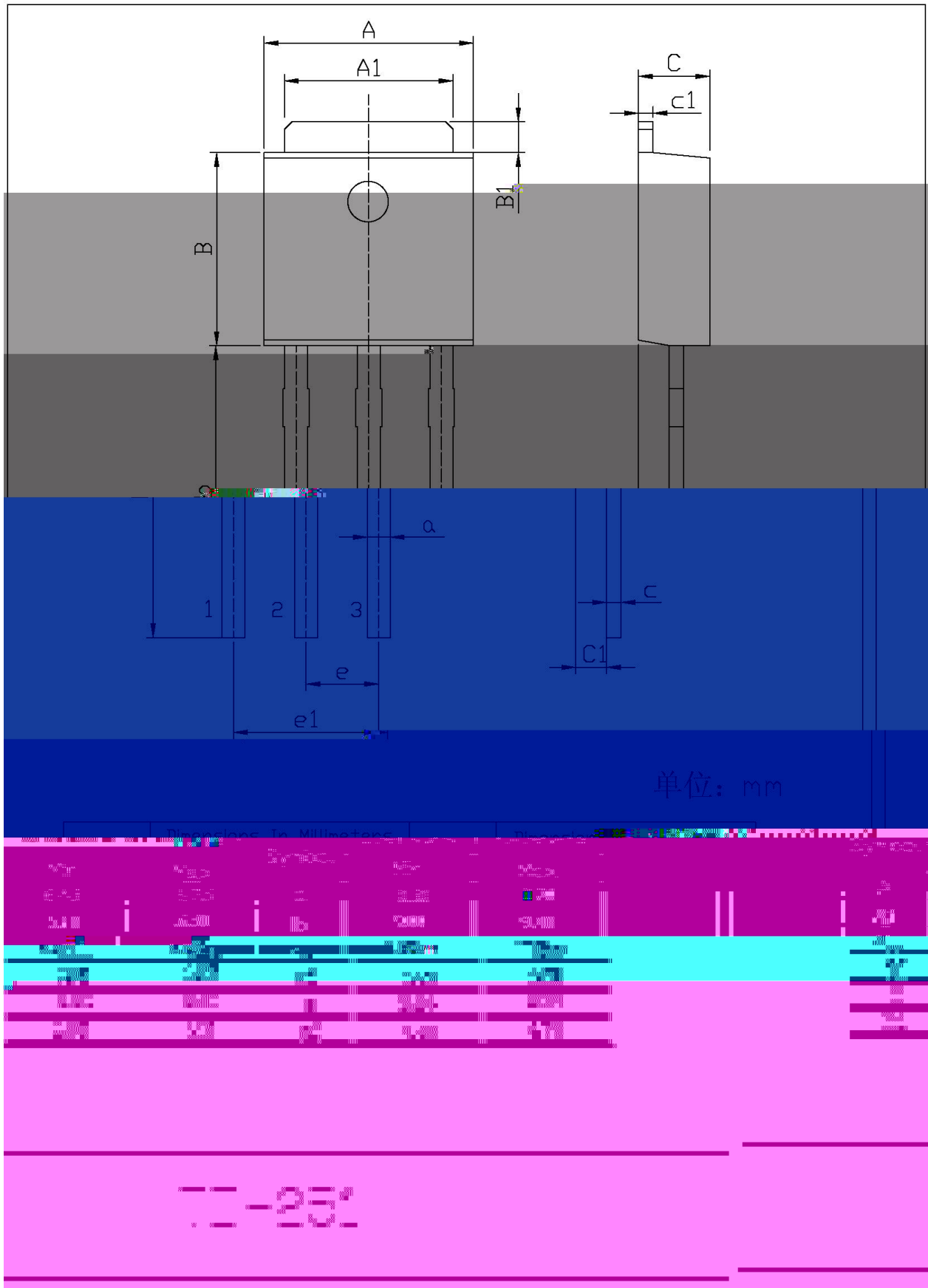
/ h_{FE} Classifications & Marking

See Marking Instructions.

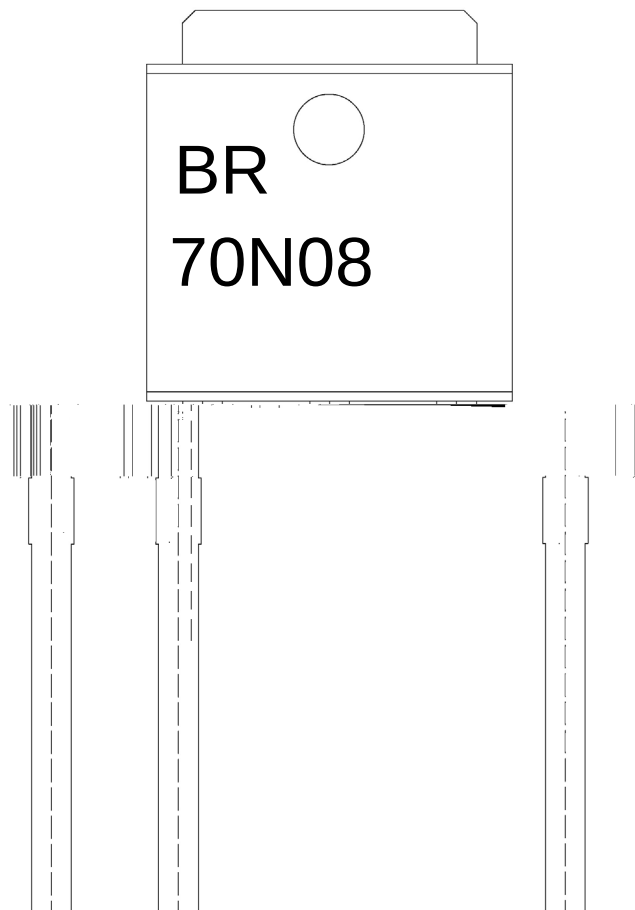
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	80	V
Drain Current	$I_{D(TC=25)}$	70	A
Drain Current	$I_{D(TC=100)}$	37.7	A
Drain Current - Pulsed	I_{DM}	260	A
Gate-Source Voltage	V_{GSS}	± 20	V
Single Pulsed Avalanche Energy	E_{AS}	518	mJ
Avalanche Energy Repetitive	E_{AR}	6.1	mJ
Avalanche Energy Single Pulse	I_{AR}	70	A
Total Power Dissipation	$P_{D(TC=25)}$	130	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250 A$	80			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=75V$ $V_{GS}=0V$			1	A
		$V_{DS}=60V$ $T_C=125$			10	A
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 0.1	A
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250 A$	2		4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=40A$		9.5	12	m
Forward Transconductance	g_{FS}	$V_{DS}=40V$ $I_D=40A$		20		S
Drain-Source Diode Forward Voltage	V_{SD}					

I Package Dimensions



/ Marking Instructions



BR

70N08

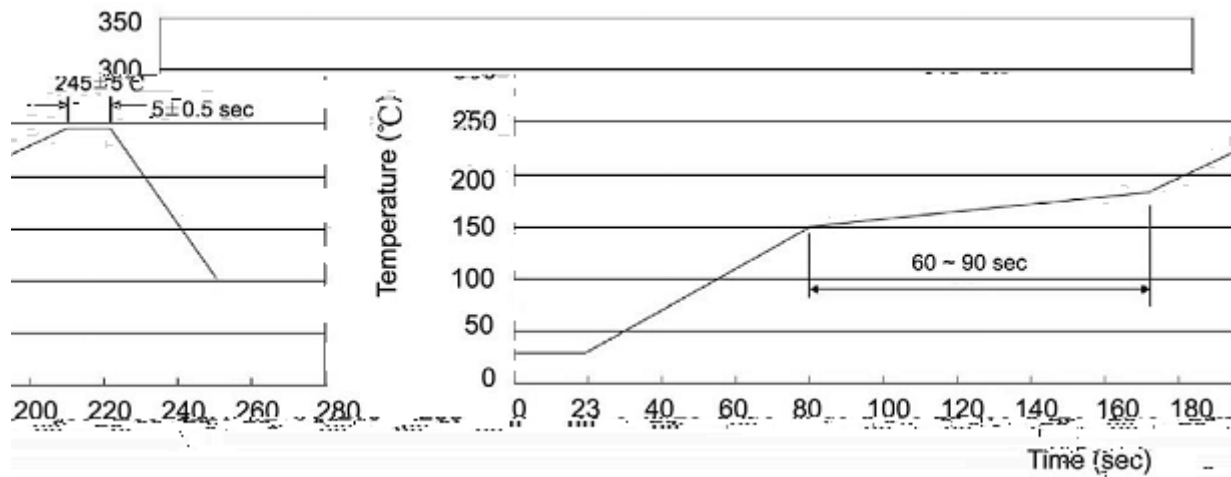
Note:

BR: Company Code

70N08: Product Type Code.

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

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Note:

- | | | | | | |
|---|-------|-----|-----------|--------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , 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. |

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		

/ TUBE

Package Type	Units					Dimension (unit mm ³)		

/ Notices