

/ Descriptions

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

/ Features

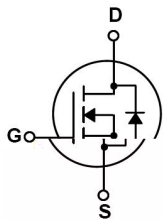
Low gate charge, low crss, fast switching.

/ Applications

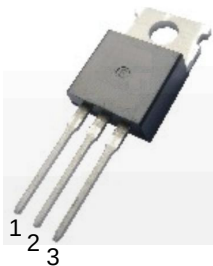
DC/DC

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.

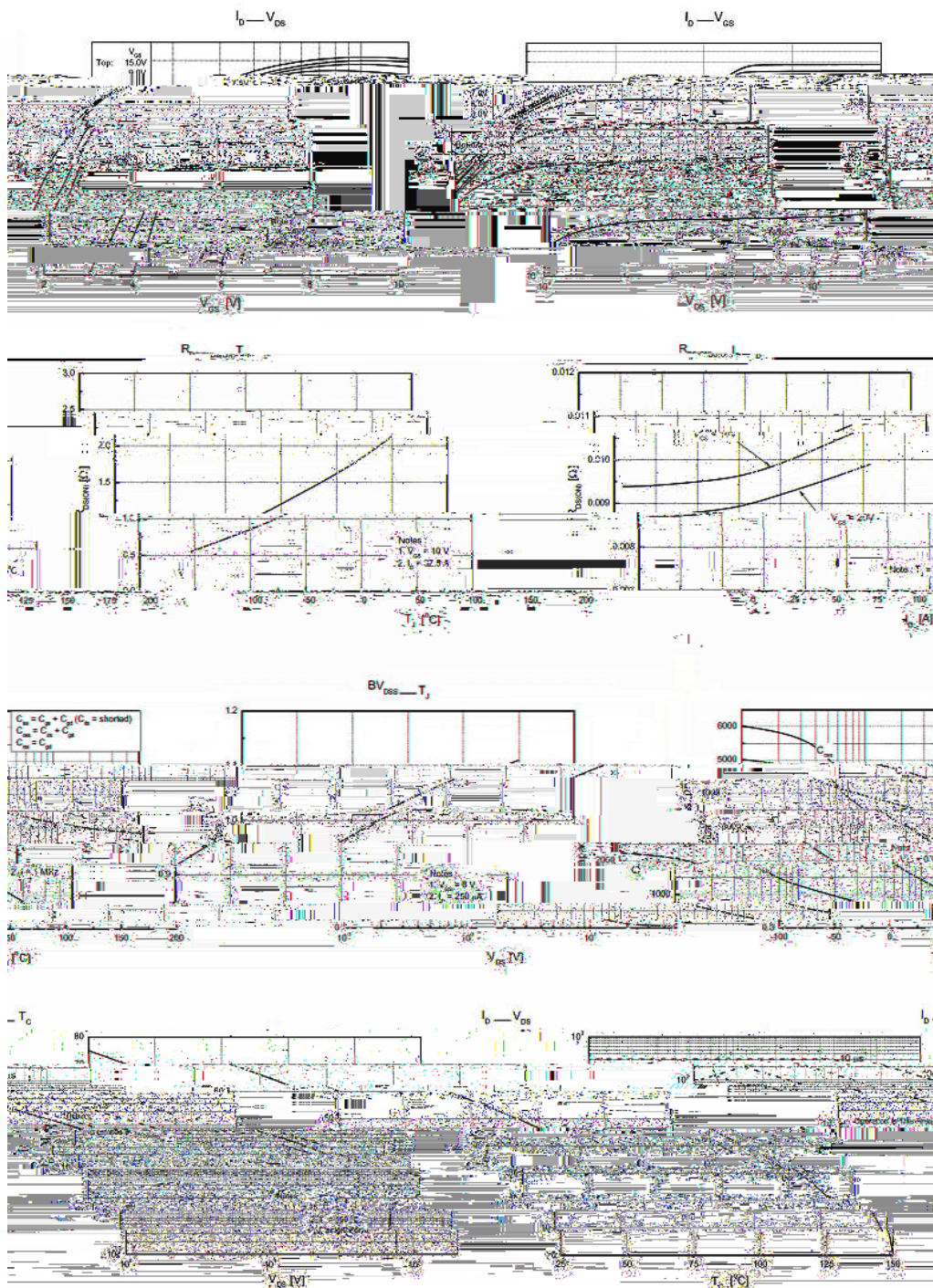
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	80	V
Drain Current	$I_D(T_c=25^\circ\text{C})$	100	A
Drain Current	$I_D(T_c=100^\circ\text{C})$	72	A
Peak Drain Current	I_{DM}	320	A
Gate-Source Voltage	V_{GSS}	± 20	V
Repetitive Avalanche Energy	E_{AS}	790	mJ
Repetitive Avalanche Energy	E_{AR}	13.1	mJ
Avalanche Current	I_{AR}	75	A
Total Power Dissipation	$P_D(T_c=25^\circ\text{C})$	165	W

Pa 1

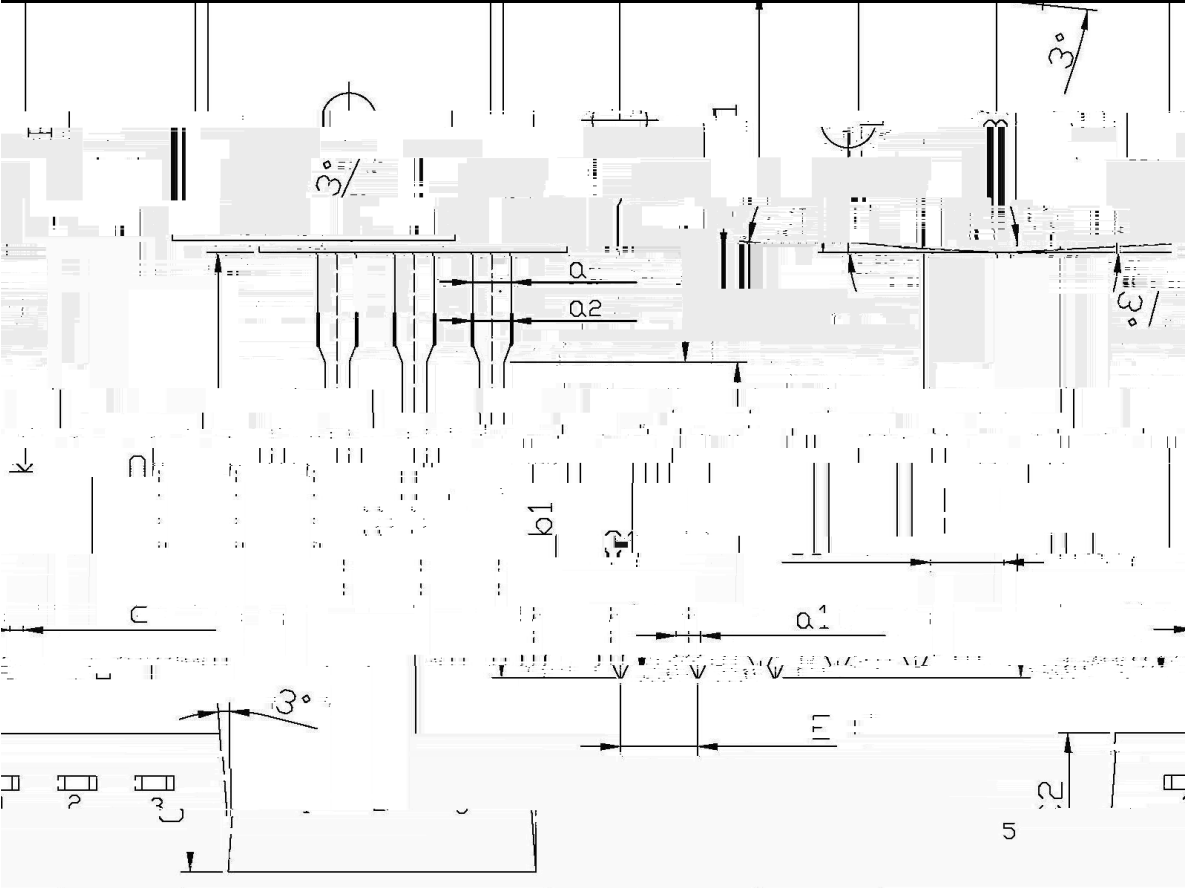
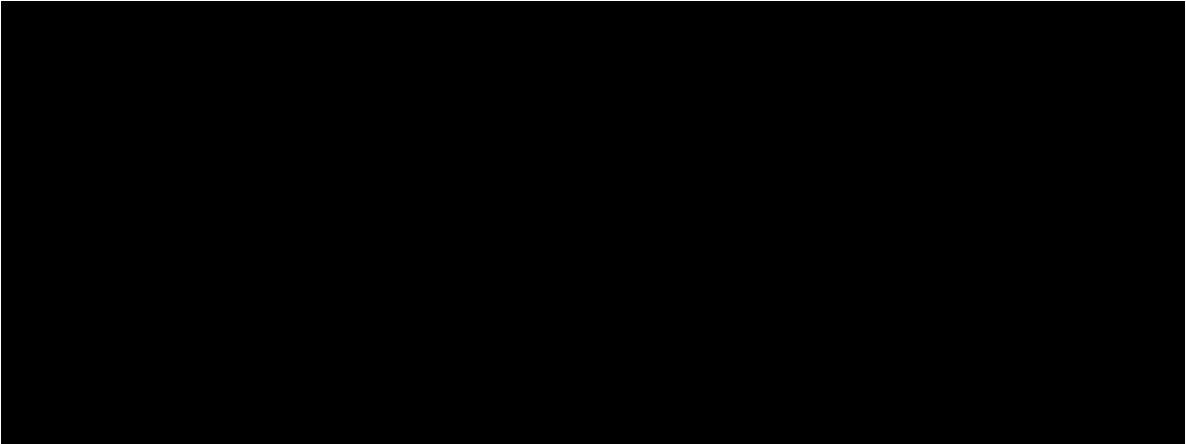
/ Source Drain diode

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward On Voltage	V_{SD}	$V_{GS}=0V$ $I_S=40A$			1.3	V
Reverse Recovery Time	t_{rr}	$I_S=40A$ $V_{GS}=0V$		48		ns
Reverse Recovery charge	Q_{rr}	$di/dt=100A/us$		105		nC

/ Electrical Characteristic Curve

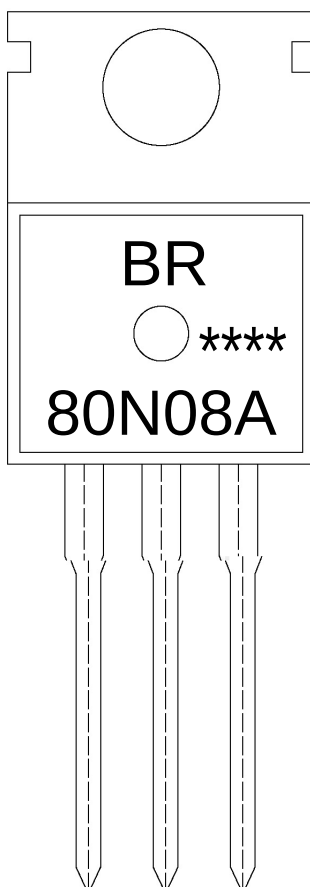


/ Package Dimensions



Dimensions in Millimeters			Dimensions in Millimeters		
Symbol	Min	Max	Symbol	Min	Max
A	9.8	10.2	C	1.2	1.4
B	2.5	2.6	D	3.0	3.4
E	9.0	9.4	F	15.7	16.1
G	2.2	2.6	H	12.6	13.6
I	0.7	0.9	J	9.6	10.6
K	0.2	0.4	L	0.1	0.2
M	1.3	1.4	N	0.2	0.4
O	1.45	1.55	P	0.2	0.4
Q	0.2	0.4	R	0.2	0.4
S	0.2	0.4	T	0.2	0.4
U	0.2	0.4	V	0.2	0.4
W	0.2	0.4	X	0.2	0.4
Y	0.2	0.4	Z	0.2	0.4

/ Marking Instructions



BR

80N08A

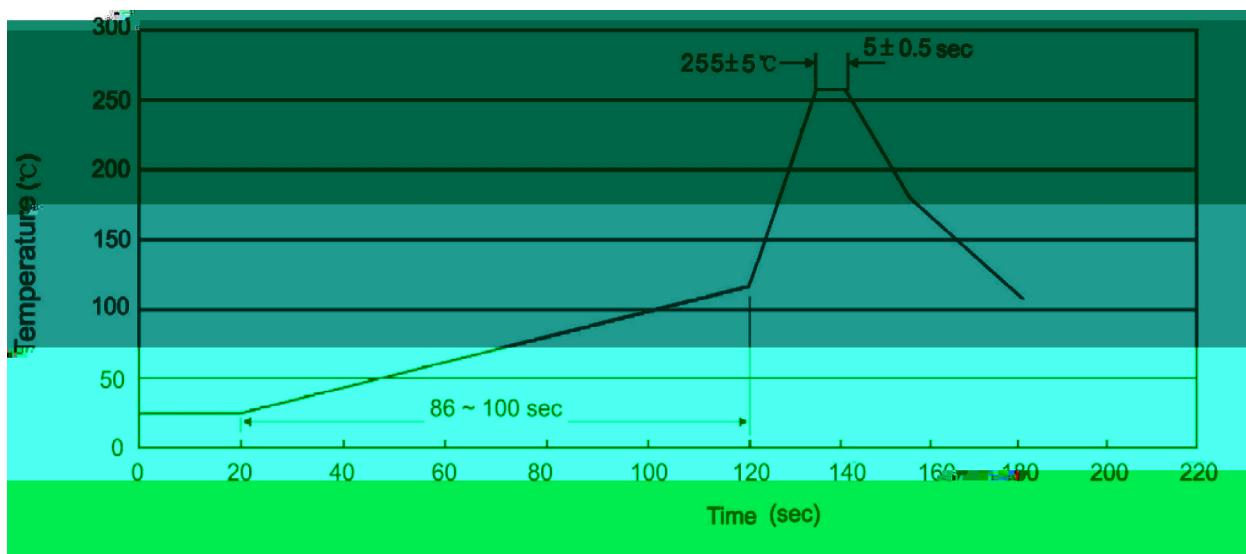
Note:

BR: Company Code

80N08A: Product Type.

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

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|---|--------------------------------------|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255±5 | | 5±0.5sec; | 2.Peak Temp.:255±5 , Duration:5±0.5sec. | |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp.:270±5°C Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices