

/ Descriptions

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

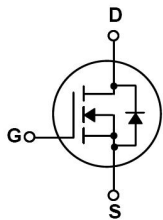
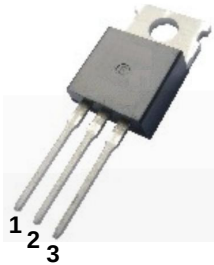
/ Features

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.

BR80N08A

Rev.C Jul.-2018

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

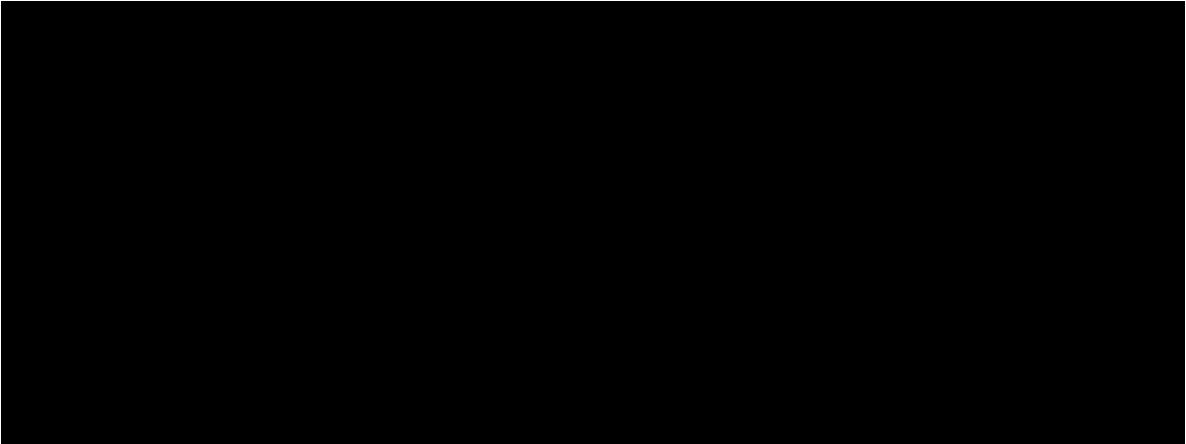
/ Source Drain diode

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

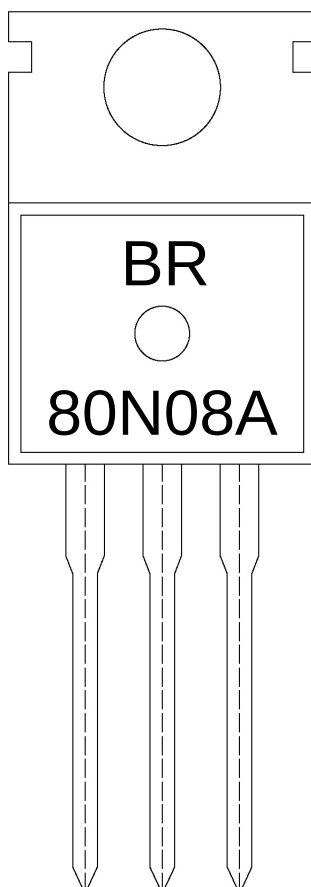


/ Package Dimensions



Dimensions In Millimeters			Dimensions In Millimeters		
Symbol	Min	Max	Symbol	Min	Max
A	9.8	10.2	C	1.2	1.4
B	3.56	3.80	D	6.3	6.7
E	15.7	16.1	B1, L	9.02	9.14
F	12.6	13.6	O1	2.2	2.6
G	9.6	10.6	O2	0.7	0.9
H	1.25	1.45			
I	1.25	1.45			
J	1.25	1.45			
K	1.25	1.45			
L	1.25	1.45			
M	1.25	1.45			
N	1.25	1.45			
O	1.25	1.45			
P	1.25	1.45			
Q	1.25	1.45			
R	1.25	1.45			
S	1.25	1.45			
T	1.25	1.45			
U	1.25	1.45			
V	1.25	1.45			
W	1.25	1.45			
X	1.25	1.45			
Y	1.25	1.45			
Z	1.25	1.45			

/ Marking Instructions



BR

80N08A

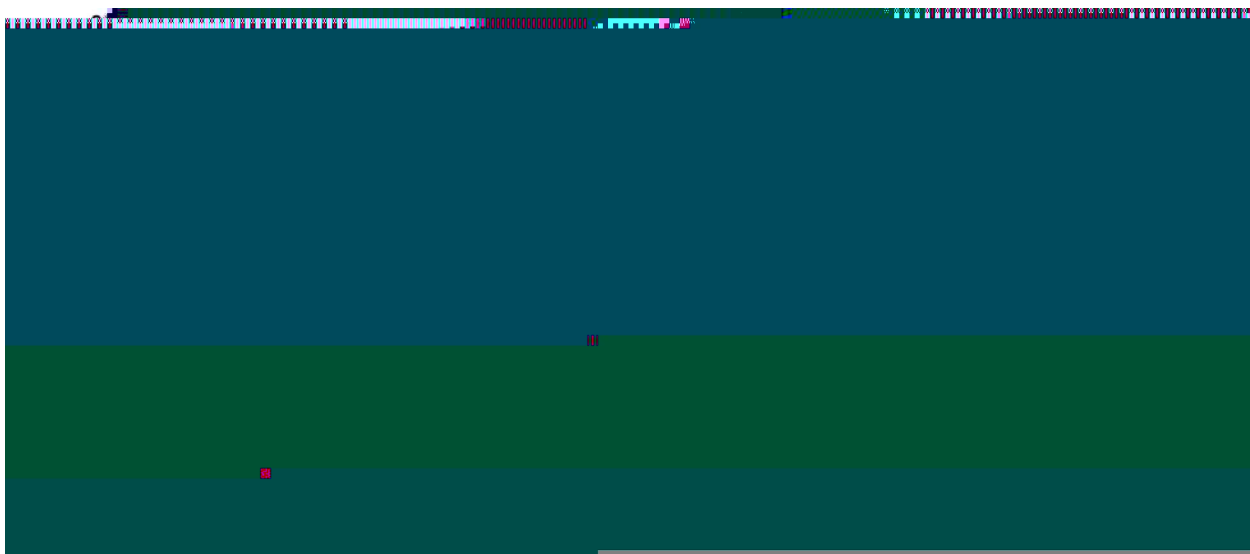
Note:

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℃ 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)		
	只袋	袋盒	只盒	盒箱	只箱	袋	盒	箱

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只套管	套管盒	只盒	盒箱	只箱	套管	盒	箱

/ Notices