

# BRC570N08IP

Rev.A Nov.-2017

## / Descriptions

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

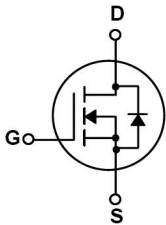
## / Features

Low gate charge, low crss, fast switching.

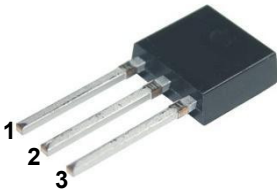
## / Applications

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<sub>FE</sub> Classifications & Marking

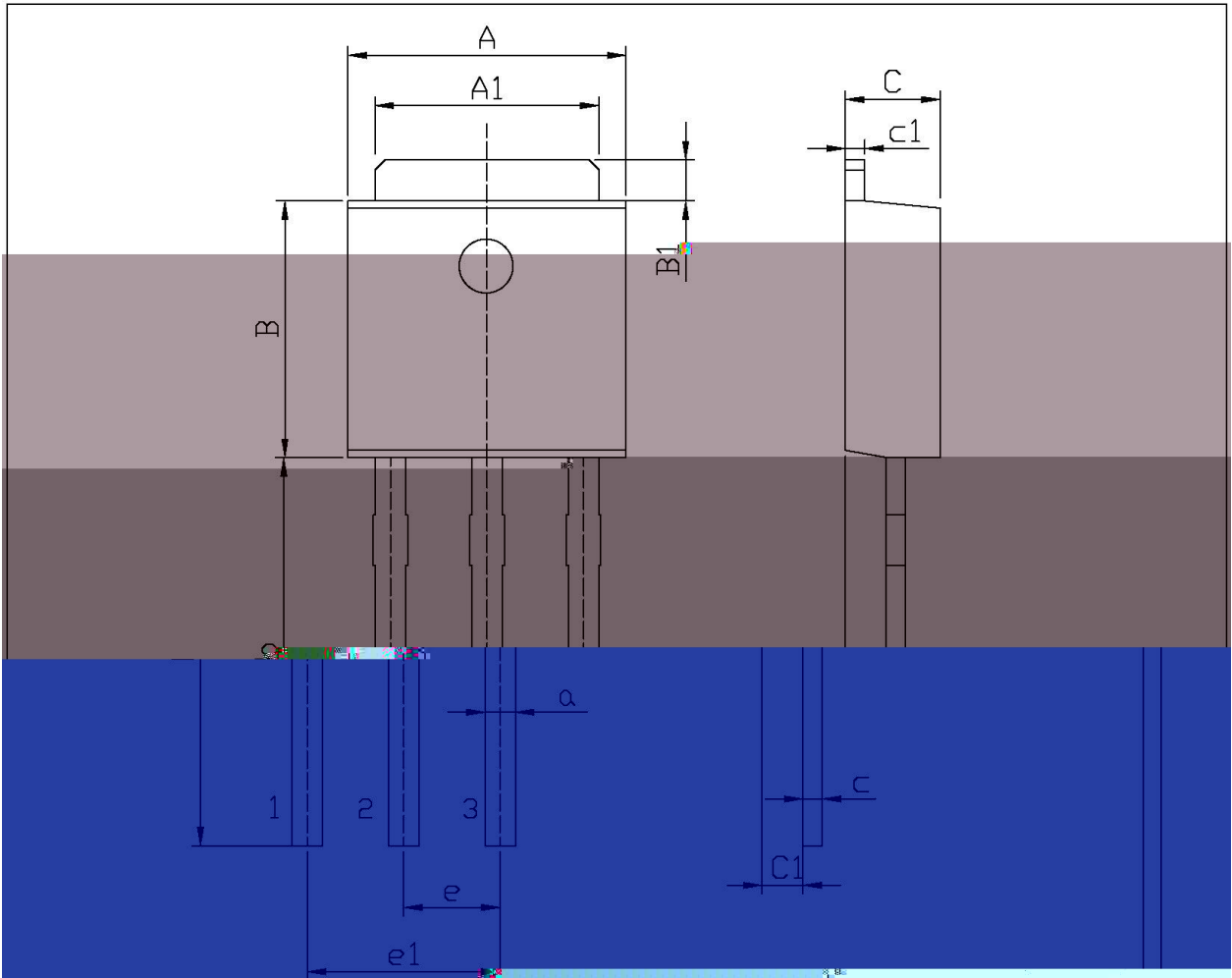
See Marking Instructions.

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	$V_{GSS}$	$\pm 20$	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	$BV_{DSS}$	$V_{GS}=0V$ $I_D=250\mu A$	80			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=75V$ $V_{GS}=0V$			1	$\mu A$
		$V_{DS}=60V$ $T_C=125$			10	$\mu A$
Gate-Body Leakage Current Forward	$I_{GSS}$	$V_{GS}=\pm 20V$ $V_{DS}=0V$			$\pm 0.1$	$\mu A$
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	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	$V_{SD}$					

**BRCS4(BRC415) fN08IP**

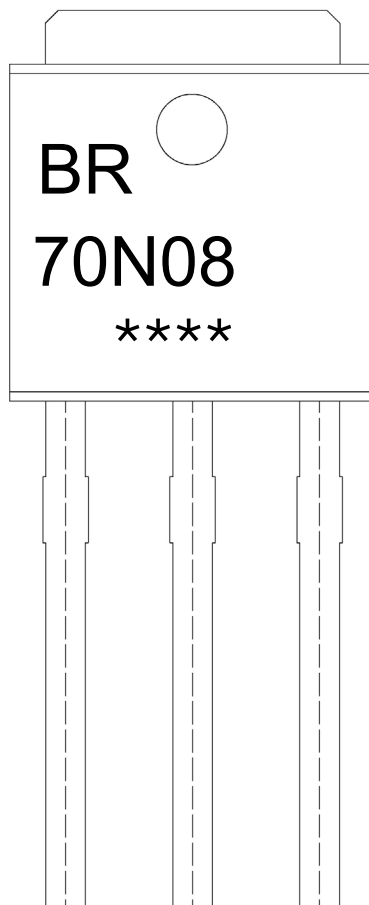
**/ Package Dimensions**



单位: mm

Dimensions In Millimeters		Symbol	Dimensions In Millimeters		Symbol
Min	Max		Min	Max	
6.45	6.75	a	0.50	0.70	A
5.10	5.50	b	9.00	9.40	A1
5.95	6.25	C	2.00	2.50	B

/ Marking Instructions



BR

70N08

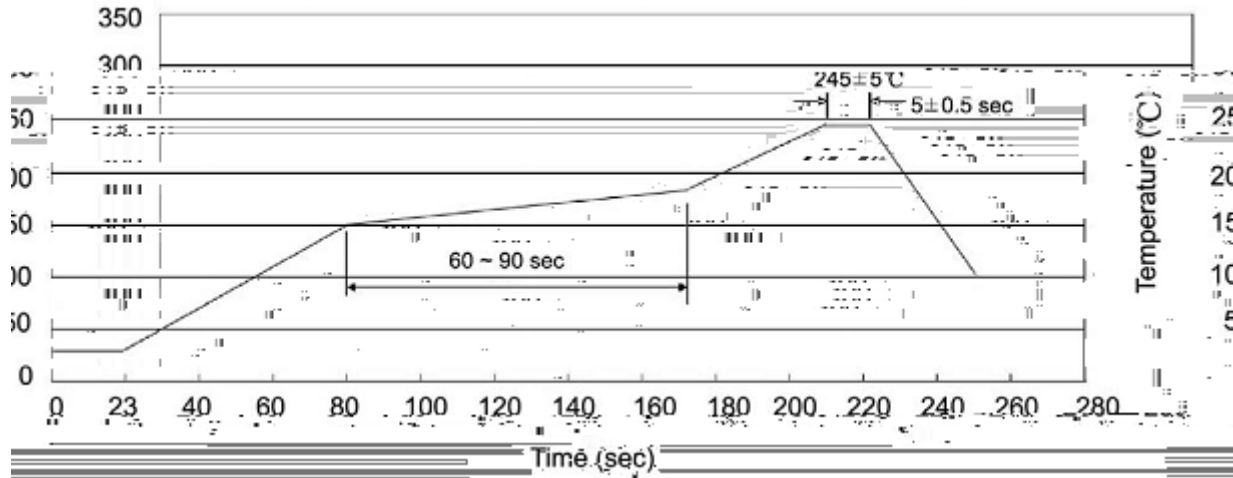
Note:

BR: Company Code

70N08: Product Type Code.

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

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



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 <sup>3</sup> )		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-251	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type	Units					Dimension (unit mm <sup>3</sup> )		
	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

/ Notices