

# BRB100N03

Rev.A Jul.-2016

## / Descriptions

TO-263          N          MOS          N-CHANNEL MOSFET in a TO-263 Plastic Package.

## / Features

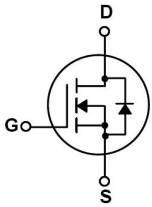
Low gate charge, low crss, fast switching.

## / 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 2,4 D          PIN 3 S

## / h<sub>FE</sub> Classifications & Marking

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DSS}$	30	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	100	A
Peak Drain Current	$I_{DM}$	400	A
Gate-Source Voltage	$V_{GSS}$	$\pm 20$	V
Single Pulsed Avalanche Energy	$E_{AS}$	875	mJ
Total Power Dissipation	$P_D(T_C=25^\circ\text{C})$	100	W
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to 150	

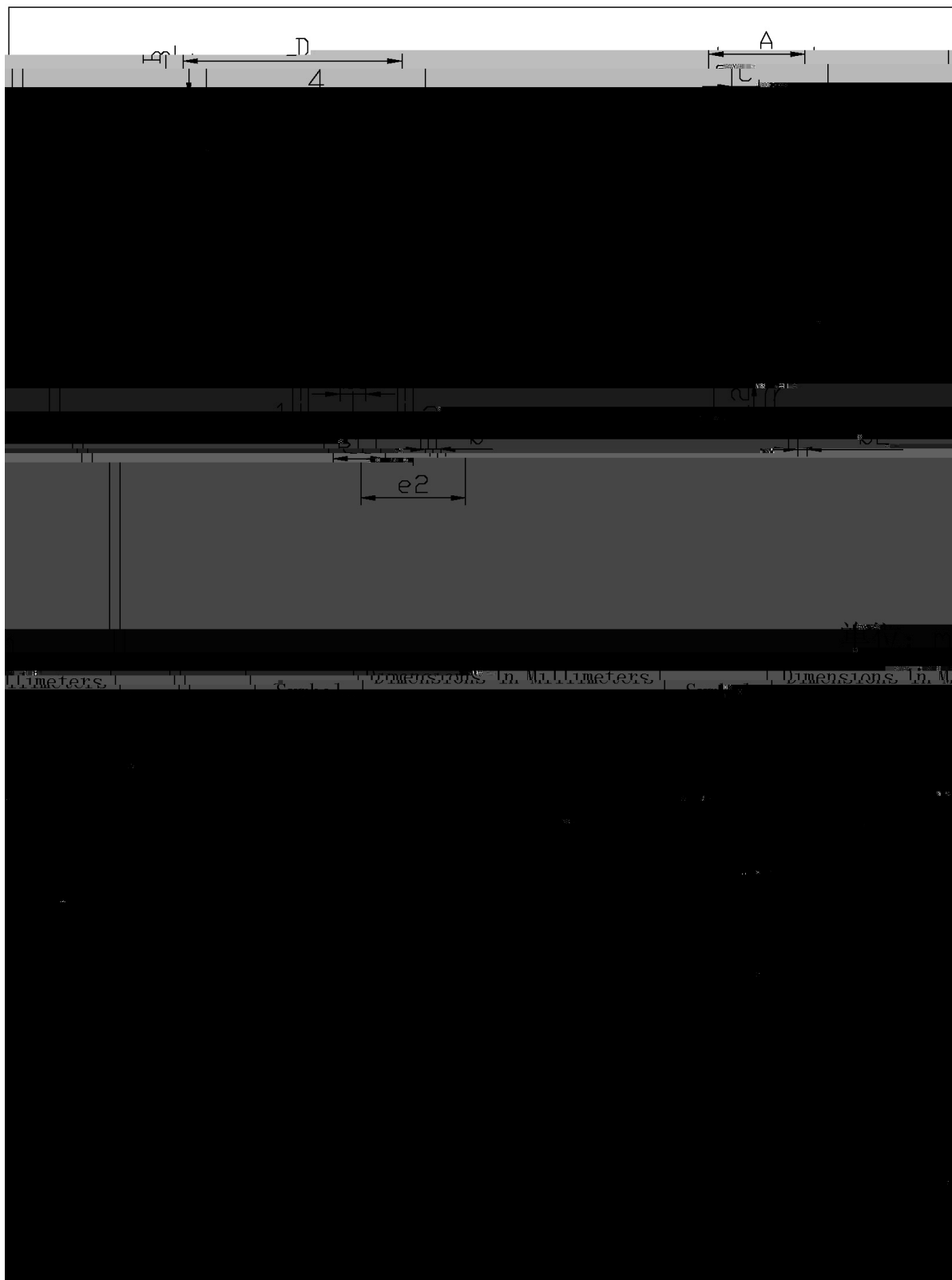
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Zero Gate Voltage Drain Current	$BV_{DSS}$	$V_{GS}=0V$ $I_D=250\mu A$	30			V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=30V$ $V_{GS}=0V$			1	$\mu A$
Gate-Body Leakage Current Forward	$I_{GSS}$	$V_{GS}=\pm 20V$ $V_{DS}=0V$			$\pm 0.1$	$\mu A$
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	1.0		3.0	V
Forward On Voltage	$V_{SD}$	$I_S=20A$ $V_{GS}=0V$			1.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=50A$		3.5	4.5	m

**BRB100N03**

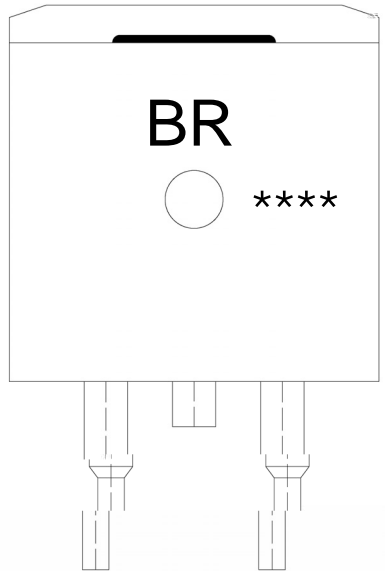
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**DATA SHEET**

/ Package Dimensions



**/ Marking Instructions**



BR

100N03

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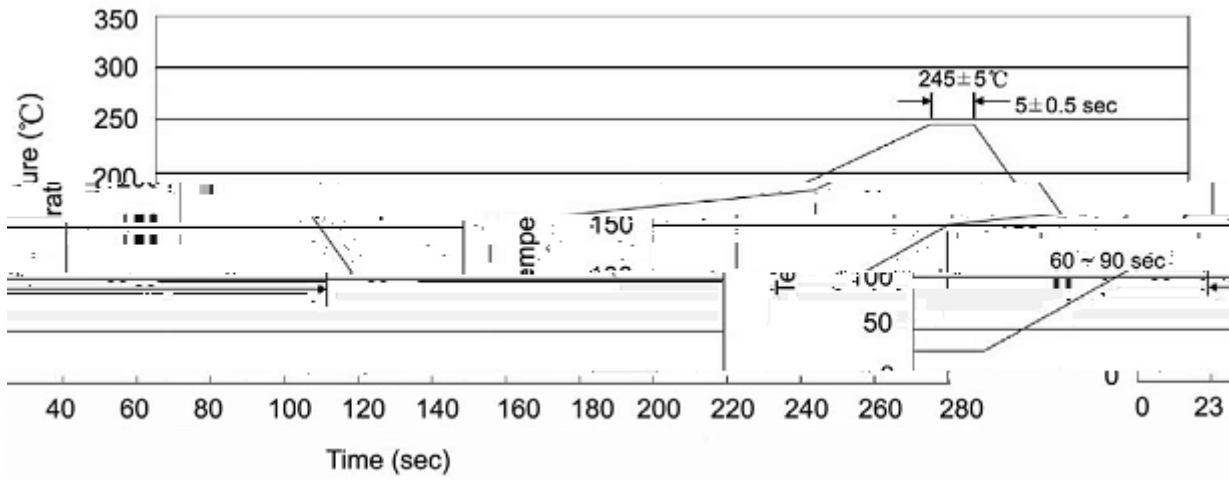
Note:

BR: Company Code

100N03: 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 | 245±5 |     |    | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 |       |     | 2  | 10 /sec.  | 3. Cooling Speed: 2~10 /sec.            |