

BRB100N03

Rev.A Jul.-2016

/ Descriptions

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

/ Features

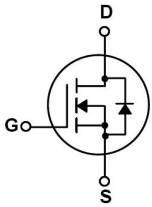
Low gate charge, low crss, fast switching.

/ 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_{FE} 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}	± 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	

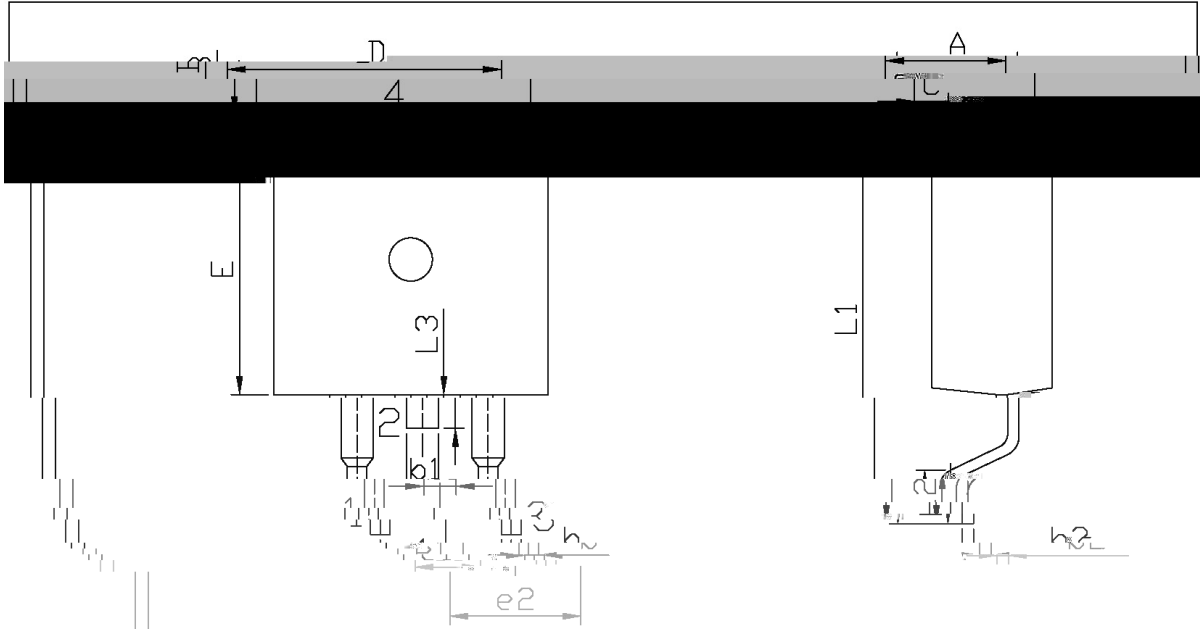
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Zero Gate Voltage Drain Current	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	30			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=30V$ $V_{GS}=0V$			1	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	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

Rev.A Jul.-2016

DATA SHEET

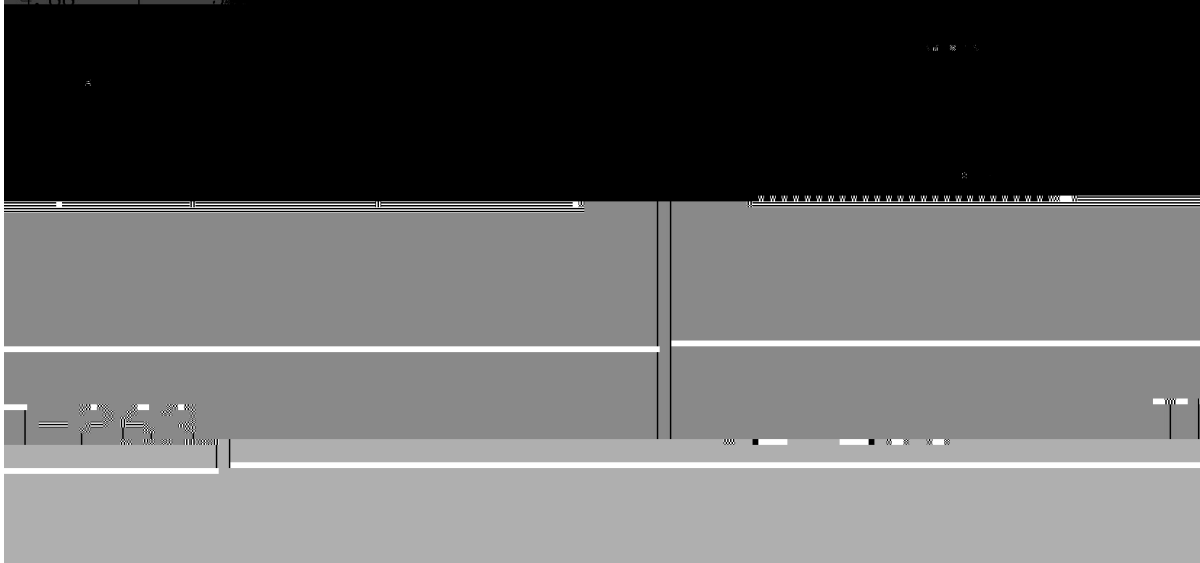
/ Package Dimensions



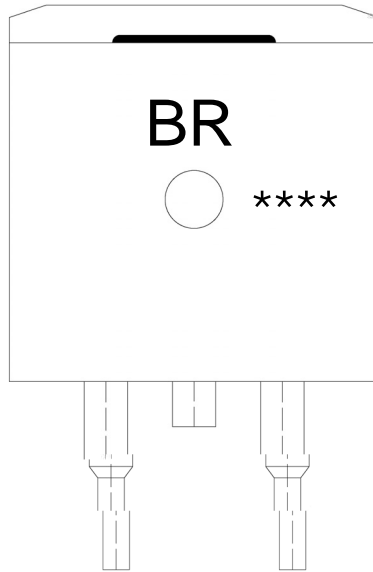
單位: mm

Dimensions in Millimeters

Max	Min	Max	Min
9.40	4.30	4.70	9.00
2.74	1.00	1.40	2.34



/ Marking Instructions



BR

100N03

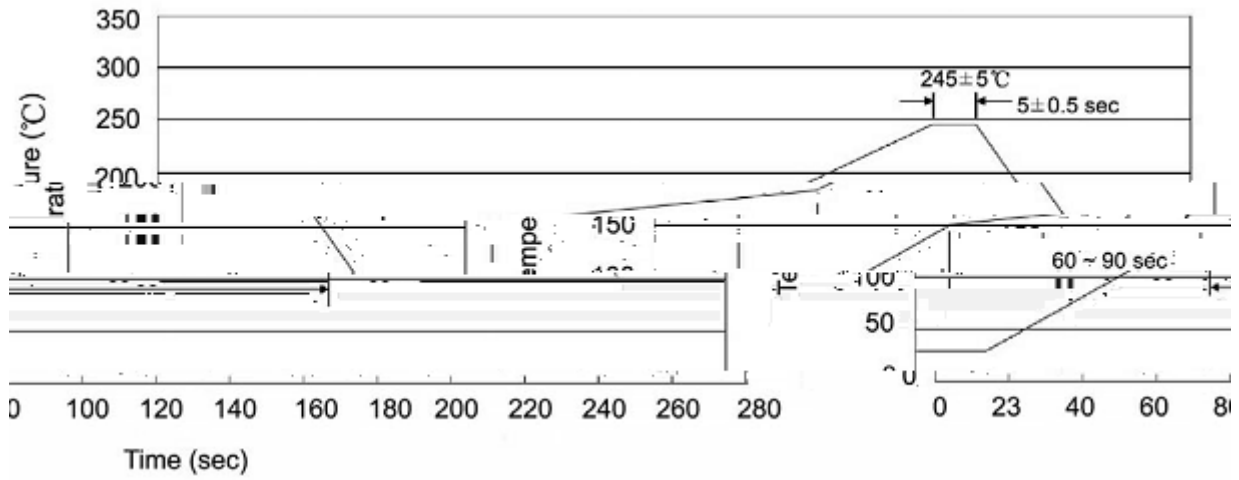
Note:

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. |