

5 é / Descriptions

TO-263 .> // x N ?ú 3 MOS « | • 'ož N-CHANNEL MOSFET in a TO-263 Plastic Package.

¤ ª / Features

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Low gate charge, low crss, fast switching. Halogen-free Product.

Đ ÷ / Applications

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These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

Ã W] Ô • / Equivalent Circuit

• Ô - æ / Pinning

1 2 4
3

PIN1 y G PIN 2o•4 y D PIN 3 y S

Z Ü B , M V / h_{FE} Classifications & Marking

• - ~ ª ¢ož See Marking Instructions.

@ f Parameter	... Z Symbol	f > Rating	% y 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}	1164	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
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	

@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 > Min	Á ° > Typ	Â Ý > Max	% y Unit
Zero Gate Voltage Drain Current	BV_{DSS}	$V_{GS}=0V$ $I_D=250\text{ A}$	80			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=80V$ $V_{GS}=0V$			1	A
		$V_{DS}=80V$ $V_{GS}=0V$ $T_C=125^\circ\text{C}$			10	A
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 0.1	A
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\text{ A}$	2		4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=40A$		6.5	8	m
Forward Transconductance	g_{FS}	$V_{DS}=5V$ $I_D=30A$		58		S

Ø □ =) ¢ / Package Dimensions

, M y f / Marking Instructions

BR

80N08A

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BR y , [W A

4 ' y ° Z W A

y ħ D Z W A k š ħ D Z J ož

Note:

BR: Company Code

80N08A: Product Type.

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

šWD t... •Žč (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLURU] 9URJKXOTM 6

a č y

1o• Ä ½ “† 150 ½180 - k ž • 60 ½90sec;

2o• Q > “† 245 r5 - k ž • 4 Ò 5 r0.5sec;

3o•D N ò i Ò 0, † 2 ½10 - /sec.

Note:

1.Preheating:150~180 - , Time:60~90sec.

2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“† y 260 r5 -

ž • y 10 r1 sec.

Temp.:260±5

Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type ß m ù ´	Units g m ô h					Dimension g m d Ê (unit ! mm³)		
	Units/Reel / í	Reels/Inner Box í / ç	Units/Inner Box / ç	Inner Boxes/Outer Box ç / ±	Units/Outer Box / ±	Reel	Inner Boxç	Outer Box±
TO-263	800	1	800	5	4,000	13s ×24	360×360×50	385×257×392

ì ´ x / TUBE

Package Type ß m ù ´	Units g m ô h					Dimension g m d Ê (unit ! mm³)		
	Units/Tube /Š •	Tubes/Inner Box Š • / ç	Units/Inner Box / ç	Inner Boxes/Outer Box ç / ±	Units/Outer Box / ±	TubeŠ •	Inner Boxç	Outer Box±
TO-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

„ Ð y f / Notices