

/ Descriptions

TO-251 M M E N 3 MOS 6 5 1 N-CHANNEL MOSFET in a TO-251 Plastic Package.

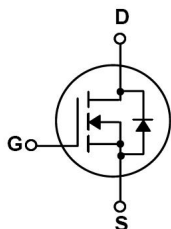
/ Features

High U_{GS}/U_{DS} ratio, low $r_{DS(on)}$, fast switching.
Low gate charge, low cr_{SS} , fast switching.

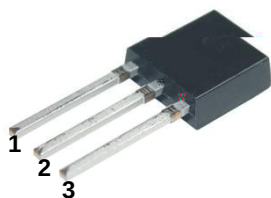
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN1 χ G

PIN 2 χ D

PIN 3 χ S

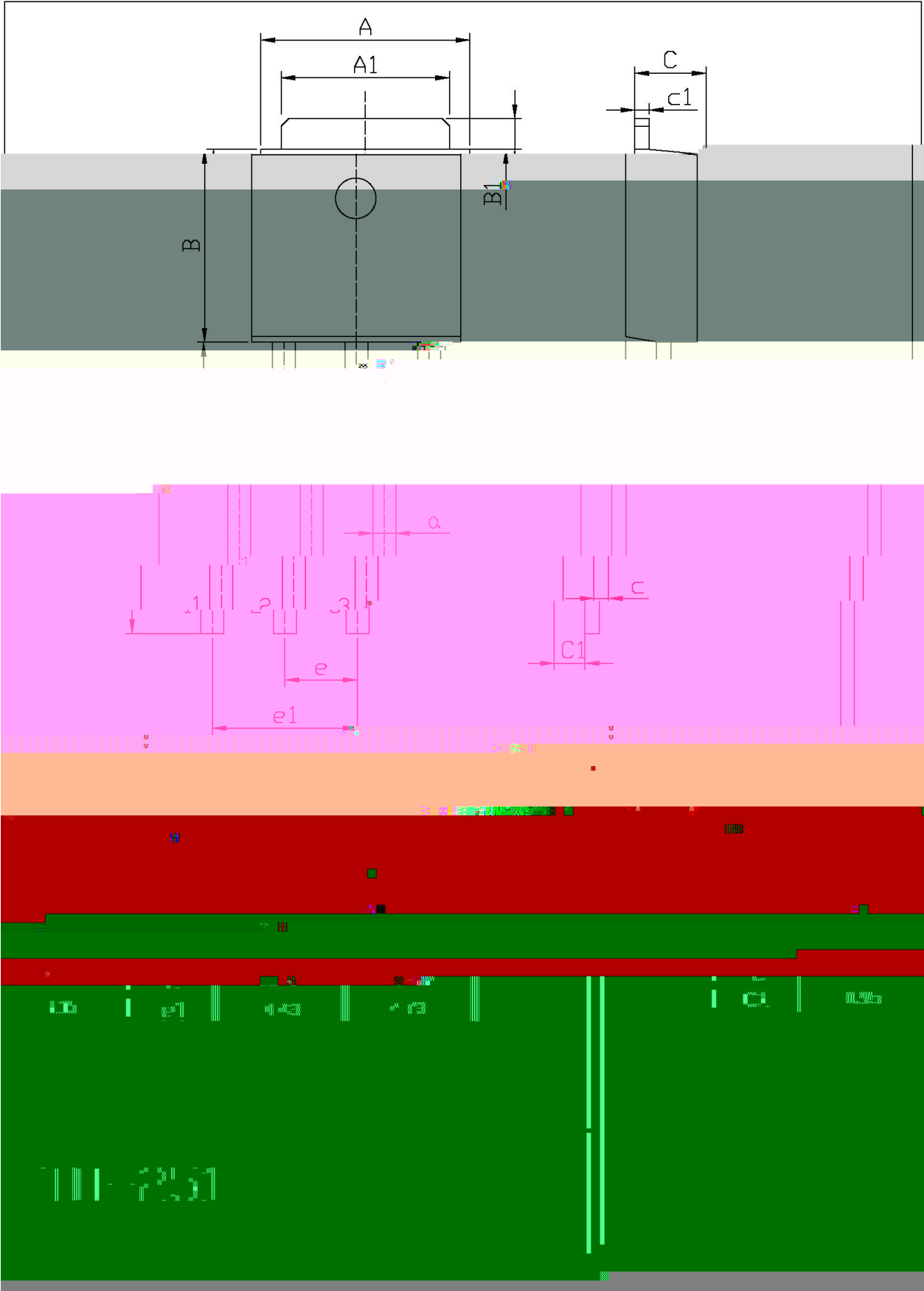
/ h_{FE} Classifications & Marking

See Marking Instructions.

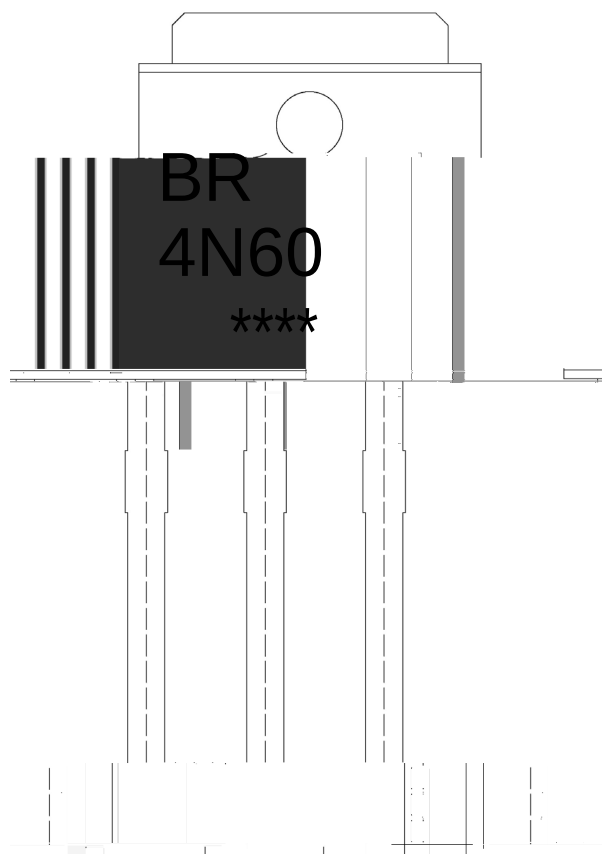
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	600	V
Drain Current	$I_D(T_c=25^\circ\text{C})$	4.0	A
Drain Current	$I_D(T_c=100^\circ\text{C})$	2.5	A
Drain Current - Pulsed	I_{DM}	16	A
Gate-Source Voltage	V_{GSS}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	240	mJ
Repetitive Avalanche Energy	E_{AR}	10	mJ
Avalanche Current	I_{AR}	4.0	A
Power Dissipation	$P_D(T_c=25^\circ\text{C})$	100	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}	$V_{GS}=0V$ $I_D=250\mu A$	600			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=600V$ $V_{GS}=0V$			10	μA

/ Package Dimensions



/ Marking Instructions



Б " X

BR X

公司代码

7Q93 X

产品代码

---- X

批次代码 1 6 1 6 1 6 1 6

Note:

BR:

Company Code

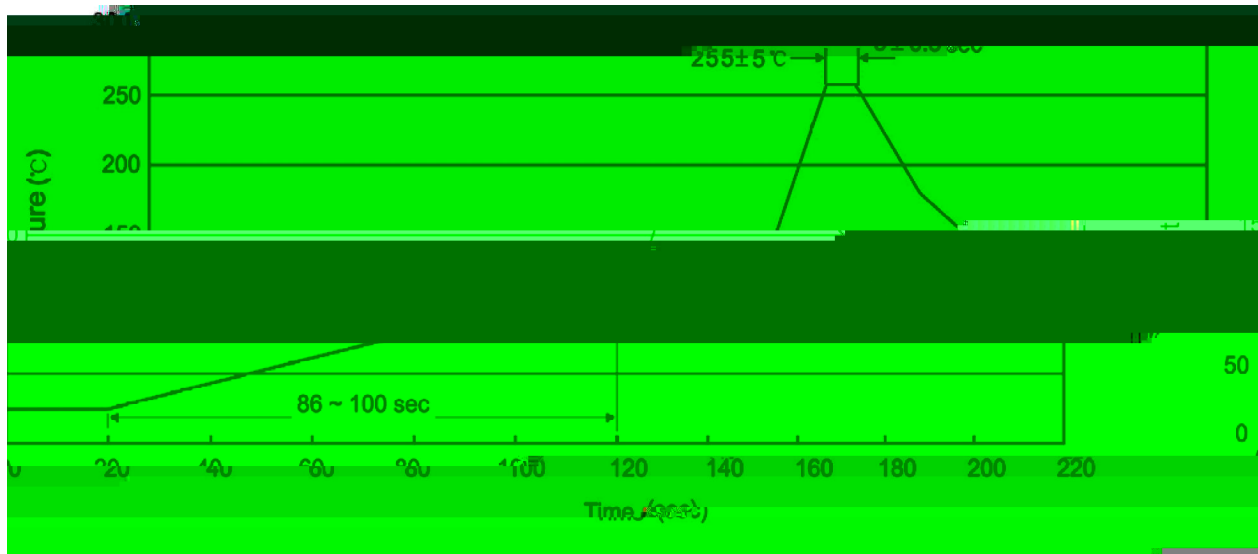
4N60:

Product Type.

****:

Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



说明

1. 预加热: 25~150 °C, Time: 60~90sec;
2. 峰值温度: 255±5 °C, Time: 5±0.5sec;
3. 冷却速度: 2~10 °C/sec.

Note:

- 1.Preheating:25~150 °C, Time:60~90sec.
- 2.Peak Temp.:255±5 °C, Duration:5±0.5sec.
3. Cooling Speed: 2~10 °C/sec.

/ Resistance to Soldering Heat Test Conditions

温度: 270±5 °C 时间: 10±1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

散装 / BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-251	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195

管装 / TUBE

Package Type 封装形式	Units/Tube 只/套管	Units 包装数量	Dimension 包装尺寸 (unit: mm ³)
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