

/ Descriptions

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

/ Features

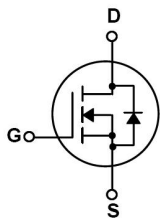
Low gate charge, Low Crss , Fast switching.

/ Applications

DF2GF

It is very suitable for various AC/DC power conversion in switching mode operation for system miniaturization and higher efficiency.

/ Equivalent Circuit



/ Pinning



PIN1 G PIN 2,4 D PIN 3 S

/ h_{FE} Classifications & Marking

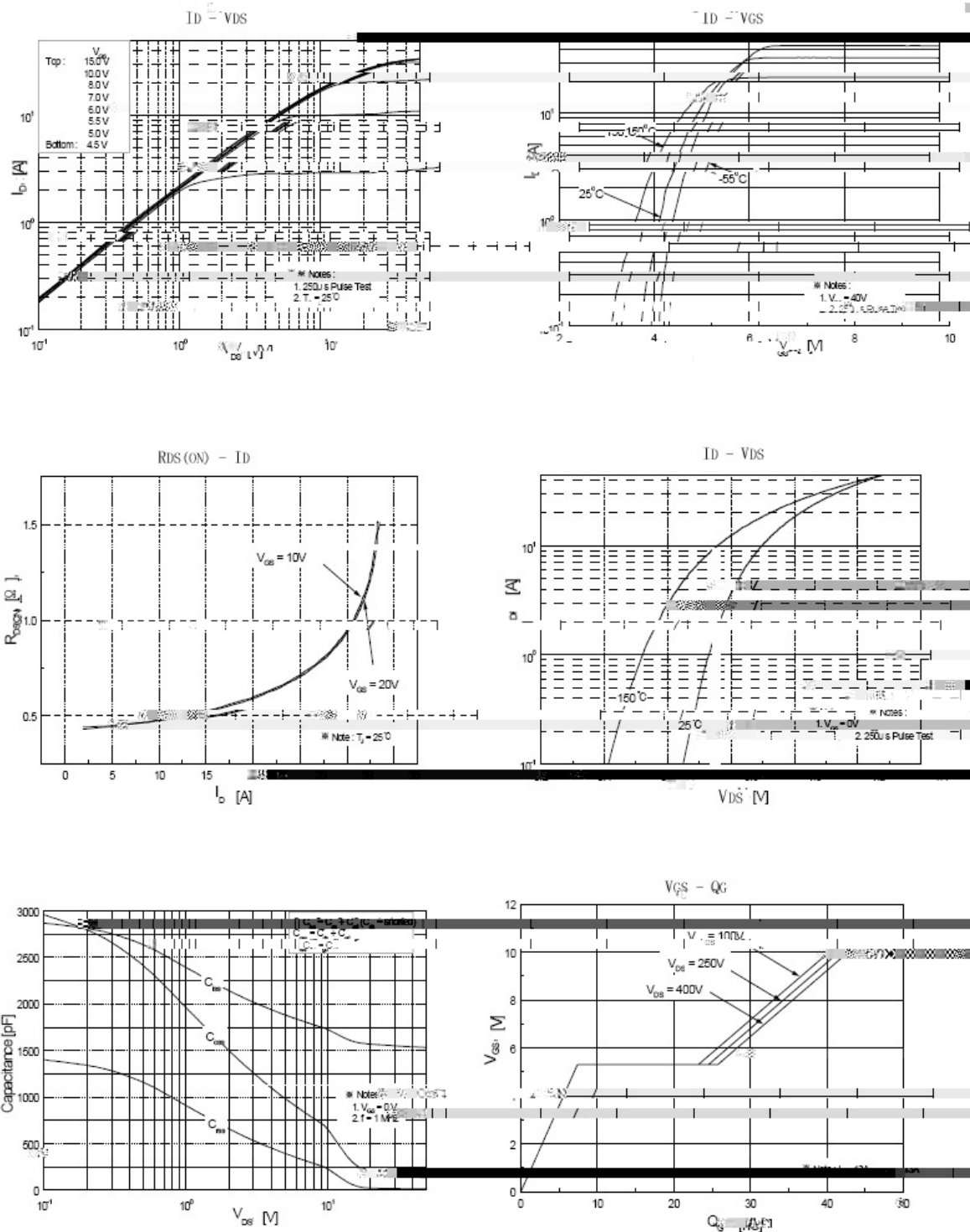
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	500	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	13	A
Drain Current	$I_D(T_C=100^\circ\text{C})$	8	A
Drain Current - Pulsed	I_{DM}	52	A
Gate-Source Voltage	V_{GS}	± 30	V
Single Pulsed Avalanche Energy	E_{AS}	860	mJ
Repetitive Avalanche Energy	E_{AR}	19.5	mJ
Avalanche Current	I_{AR}	13	A
Power Dissipation	$P_D(T_C=25^\circ\text{C})$	195	W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150	

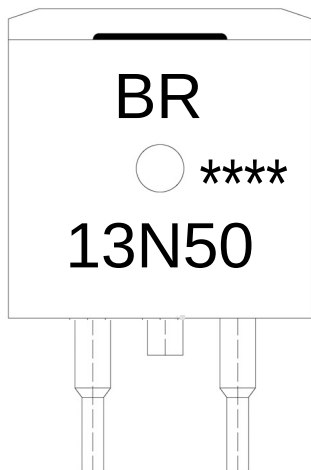
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DS}	$V_{GS}=0V$ $I_D=250\mu A$	500			V

Drain-Sou

/ Electrical Characteristic Curve



/ Marking Instructions



BR

46Q83

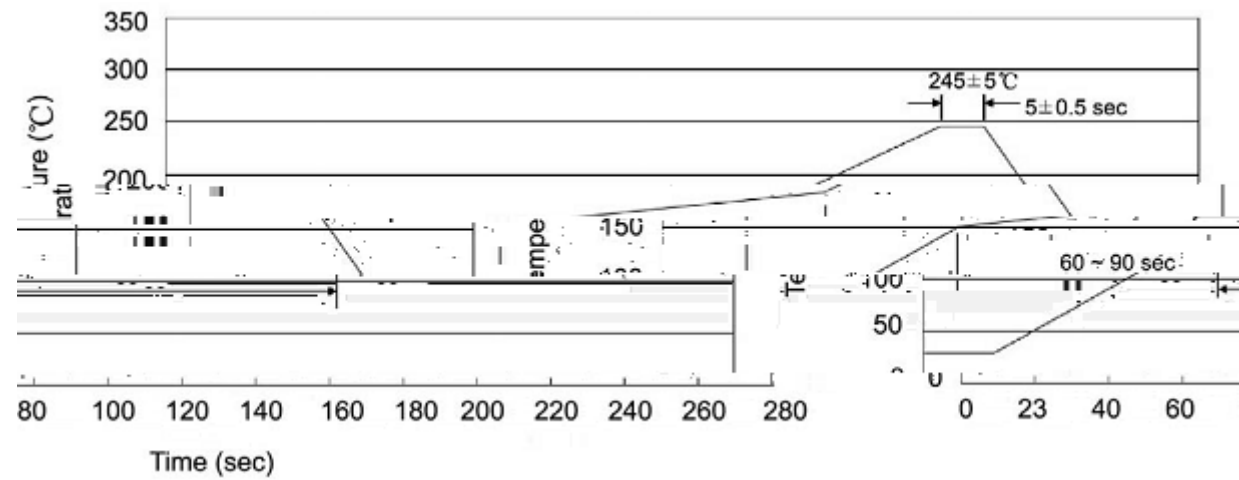
Note:

BR: Company Code

13N50: Product Type.

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

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



Note:

- 1

25 150%

60 90sec;
- 2

245 ± 5%

5 ± 0.5sec;
- 3

2 10%/sec.
- 1.Preheating:25~150%, Time:60~90sec.

2.Peak Temp.:245 ± 5%, Duration:5 ± 0.5sec.

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 ³)
	Units/Reel	Reels/Inner Box		