/ Descriptions

TO-263 Ṃ Ṃ Ŀ N ǰ MOS ʃ ɷ̃ Ẓ ˥ N-CHANNEL MOSFET in a TO-263Plastic Package.

/ Features

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Low gate charge, Low Crss , Fast switching.

/ Applications

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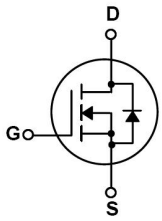
It is very suitable for various AC/DC power conversion in switching mode operatio for system miniaturization and higher efficiency.

/ Equivalent Circuit



/ Pinning



PIN1 χ G PIN 2,4 χ D PIN 3 χ S

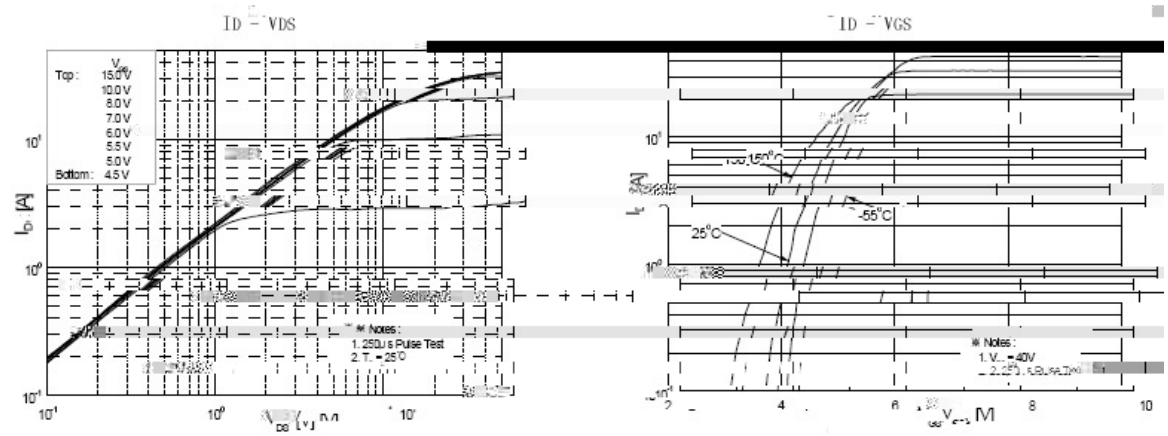
/ h_{FE} Classifications & Marking

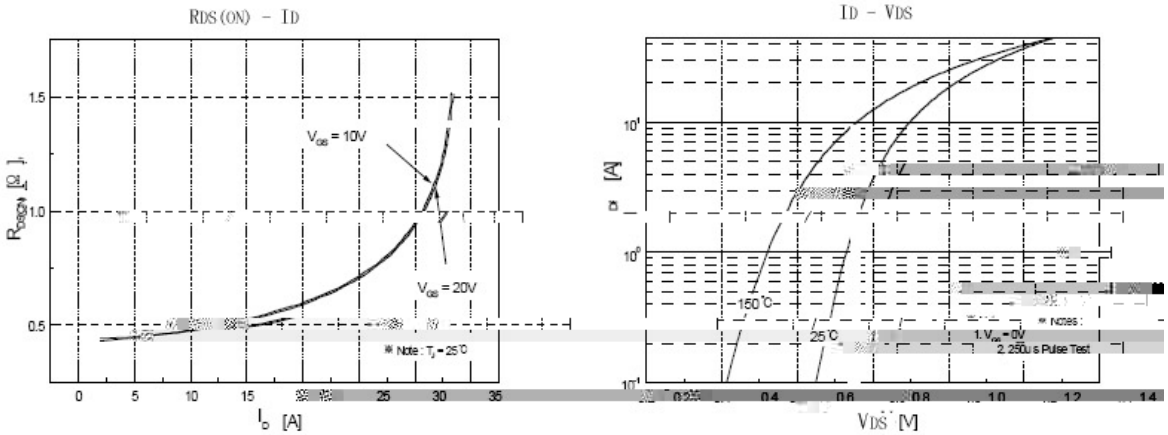
ɗ м ˥ ب ˝ See Marking Instructions.

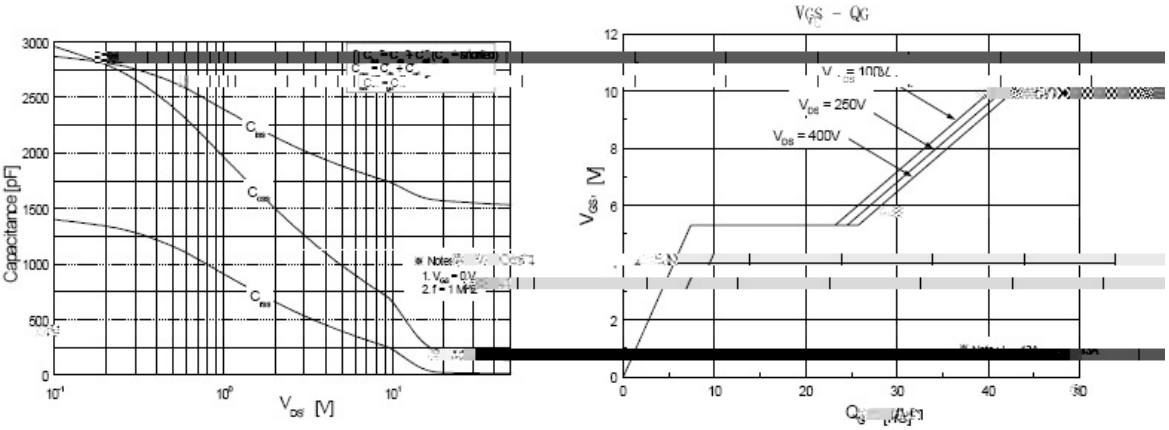
v ̈Ω̣ Parameter	ɬ N Symbol	̈Ω̣Ö Rating	D Ɉ Unit
Drain-Source Voltage	V_{DSS}	500	V
Drain Current	I_D(Tc=25)	13	A
Drain Current	I_D(Tc=100)	8	A
Drain Current - Pulsed	I_{DM}	52	A
Gate-Source Voltage	V_{GSS}	±30	V
Single Pulsed Avalanche Energy	E_{AS}	860	mJ
Repetitive Avalanche Energy	E_{AR}	19.5	mJ
Avalanche Current	I_{AR}	13	A
Power Dissipation	P_D(Tc=25)	195	W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to 150	

v ̈Ω̣ Parameter	ɬ N Symbol	⊥⊥ ;ǂ T Test Conditions	ω̣ ṇ Ö Min	Ɛ ʒ Ö Typ	ω̣ ʑ Ö Max	D Ɉ Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250μA	500			V

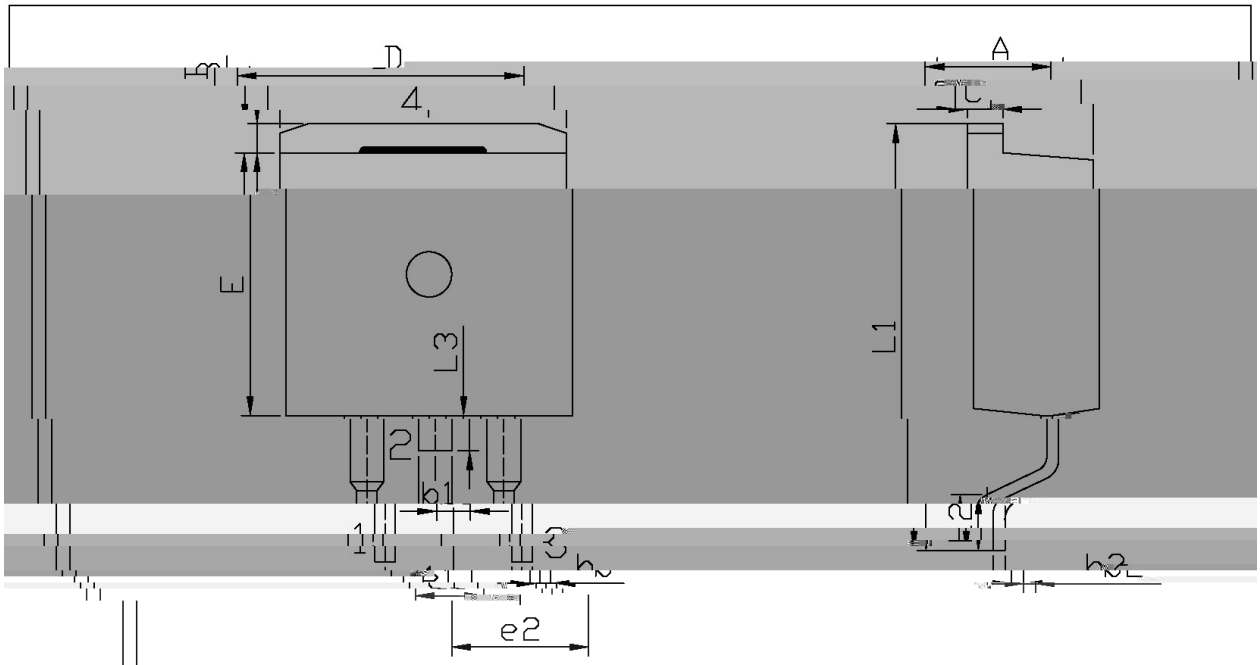
/ Electrical Characteristic Curve







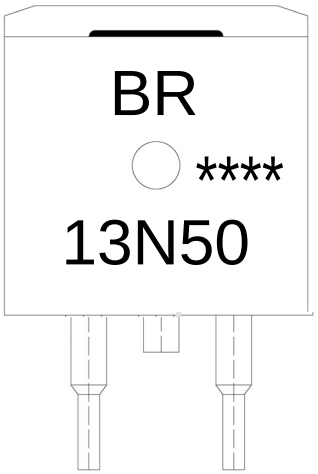
/ Package Dimensions



单位：mm

Dimensions In Millimeters		Dimensions In Millimeters	
Symbol	Min	Max	Min
A	4.30	4.70	
			9.00

/ Marking Instructions



ب ˝ χ

BR χ	ѭ ʒ ᴵ ᴵ
46Q83 χ	ѭ ʒ ᴺ ᴵ
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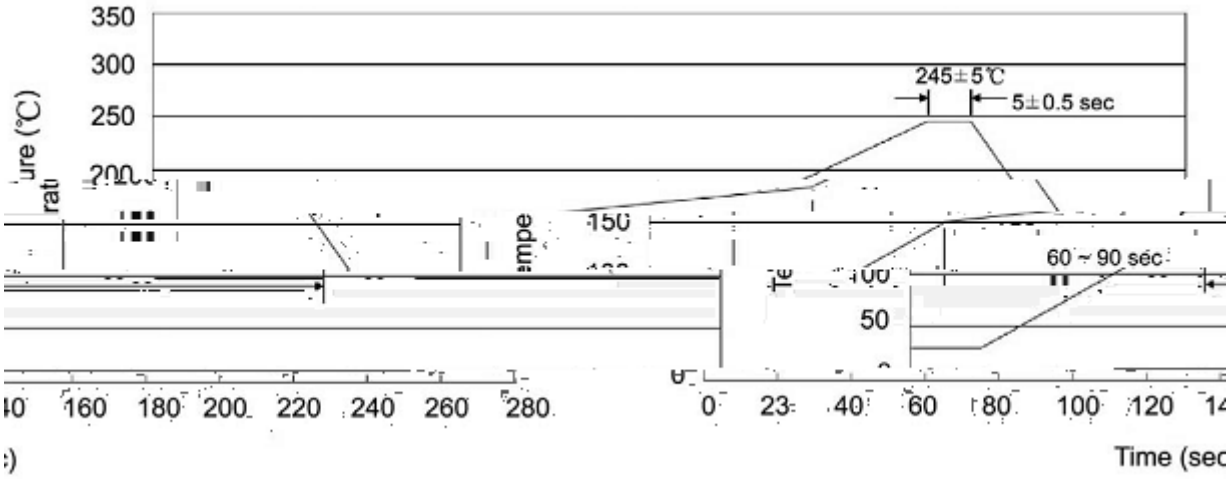
Note:

BR:	Company Code
13N50:	Product Type.
****:	Lot No. Code, code change with Lot No.

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



ب ˝ χ

1 ǂ ♬ □ ỷ 25 Ḱ 150 ɫ ı `H ڑ 60 Ḱ 90sec;

2 Š Ö □ ỷ 245 ° 5 ɫ ı `H ڑ ˙Y ⺈ ⺮ 5 ° 0.5sec;

3 ì ˙ ⺌ ˛ ɔ ھ ỷ ⺮ 2 Ḱ 10 ɫ /sec.

Note:

1.Preheating:25~150 ɫ , Time:60~90sec.

2.Peak Temp.:245 ° 5 ɫ , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ɫ /sec.

/ Resistance to Soldering Heat Test Conditions

□ ỷ χ 260 ° 5 ɫ `H ڑ χ 10 ° 1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

ɔ` γ ⊢ / REEL

Package Type	Units			Dimension (unit mm^3)
	Units/Reel /	Reels/Inner Box /	Units/Inner Box	