/ Descriptions

TO-252 ṂṂ Ŀ N ێ MOS ʃ ᾧ̃ Ẕ ˥ N-CHANNEL MOSFET in a TO-252 Plastic Package.

/ Features

Ḩ ɔ U/Ḩ ɾ ï ɔ ḳ/Ầ ʉ ھ ỷ ồ

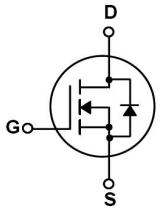
Low gate charge, low crss, fast switching.

/ Applications

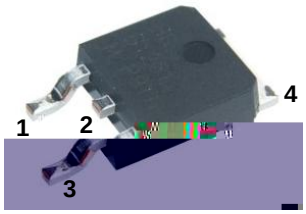
ɤ̃ ̂ ̂ ɤ ɪ ' GF2GF ɕ ̈Ω ⊃ ɪ ' Ầ ʉ

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 PIN 4 χ D

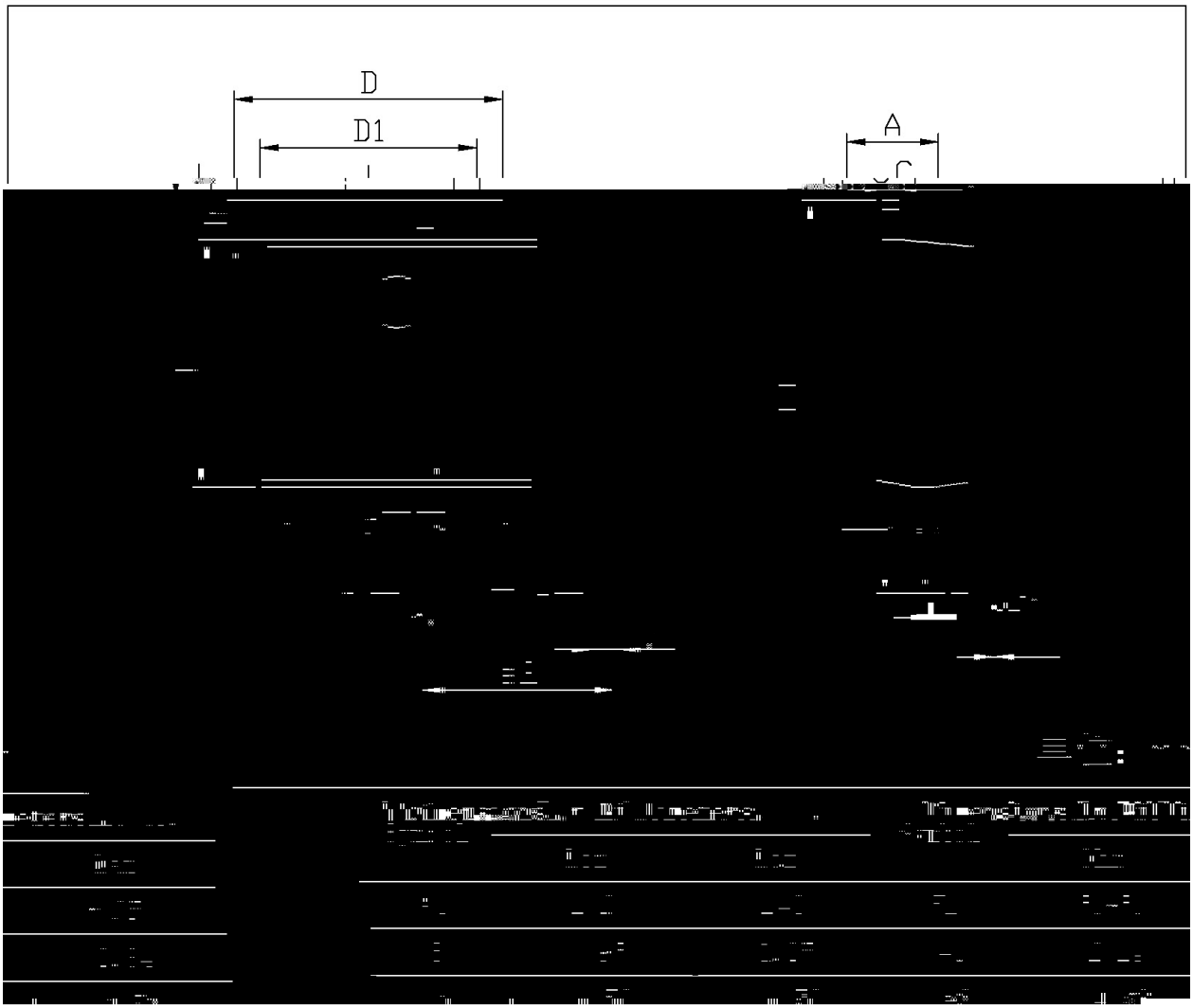
/ h_{FE} Classifications & Marking

ð ʍ ˥ ب ˝ See Marking Instructions.

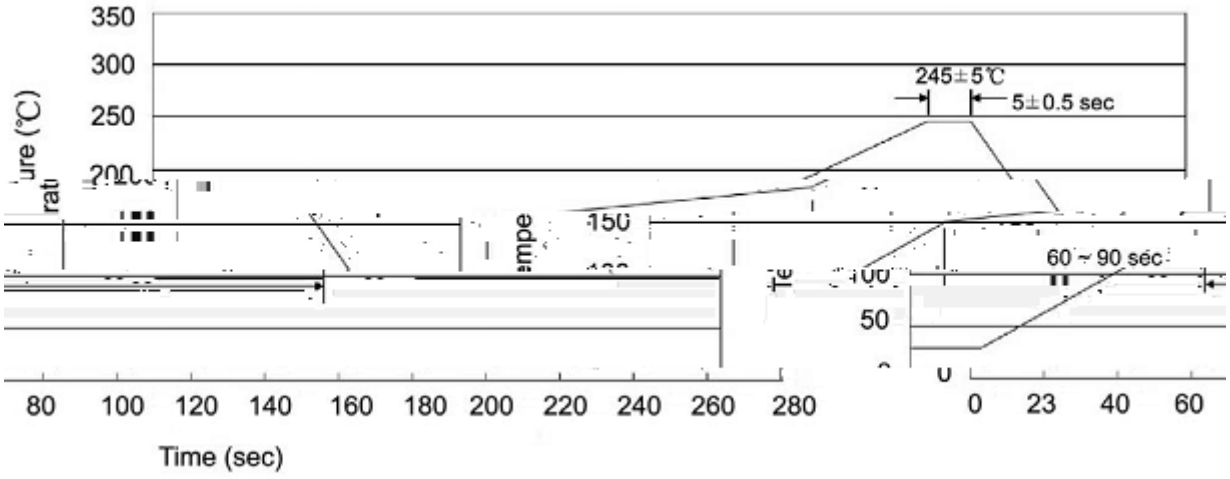
v ¨Ω Parameter	ϒ N Symbol	¨Ω Ö Rating	D Ђ Unit
Drain-Source Voltage	V_{DSS}	650	V
Drain Current	I_D(Tc=25)	5.0	A
Drain Current	I_D(Tc=100)	2.6	A
Drain Current - Pulsed	I_{DM}	18	A
Gate-Source Voltage	V_{GSS}	±30	V
Single Pulsed Avalanche Energy	E_{AS}	210	mJ
Repetitive Avalanche Energy	E_{AR}	10	mJ
Avalanche Current	I_{AR}	4.5	A
Power Dissipation	P_D(Tc=25)	54	W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to 150	

v ¨Ω Parameter	ϒ N Symbol	╨ :¦ ţ Test Conditions	ѡ ņ Ö Min	Ɛ ʒ Ö Typ	ѡ ² Ö Max	D Ђ Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250μA	650			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=650V V_{GS}=0V			1.0	μA
		V_{DS}=480V T_C=125			10	μA
Gate-Body Leakage Current, Forward	I_{GSS}	V_{GS}=±30V V_{DS}=0V			±0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=250μA	2.0		4.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V I_D=2.25A		2.0	2.5	Ω
Forward Transconductance	g_{FS}	V_{DS}=40V I_D=2.25A		4.7		S
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

/ Package Dimensions



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



ب ˝ χ

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

2 Š Ö □ ỷ 245 ° 5 ɬ ı `H ڑ ˋY ⺈ ⺮ 5 ° 0.5sec;

3 ì ˙ ⺈ ˛ ɔ ھ ỷ ⺮ 2 Ḱ 10 ɬ /sec.

Note:

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

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

3. Cooling Speed: 2~10 ɬ /sec.

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

ɔ` γ ⊢ / REEL

Package Type 封装形式	Units 包装数量			Dimension 包装尺寸 (unit: mm^3)
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	