BRFL65R190C

Rev.A May.-2024

DATA SHEET

"Yـ / Descriptions

TO-220FL N 650V

N-CHANNEL 650V Super-Junction Power MOSFET in a TO-220FL Plastic Package.

◕ È / Features

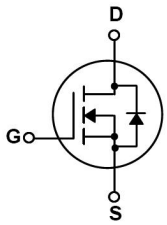
$R_{DS(on)}$×Qg 100% ROHS

Very low $R_{DS(on)}$×Qg,100%avalanche tested,RoHS compliant,HF Product.

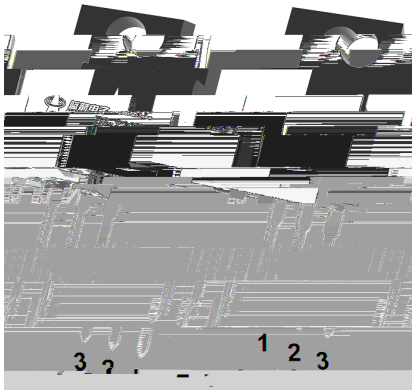
٧ ِ / Applications

For switch mode power supply, uninterruptible power supply, power factor correction.

Л ً ٚ ≠ ɛ / Equivalent Circuit



ẫ ﻸ ٗ / Pinning



PIN1 G PIN 2 D PIN 3 S

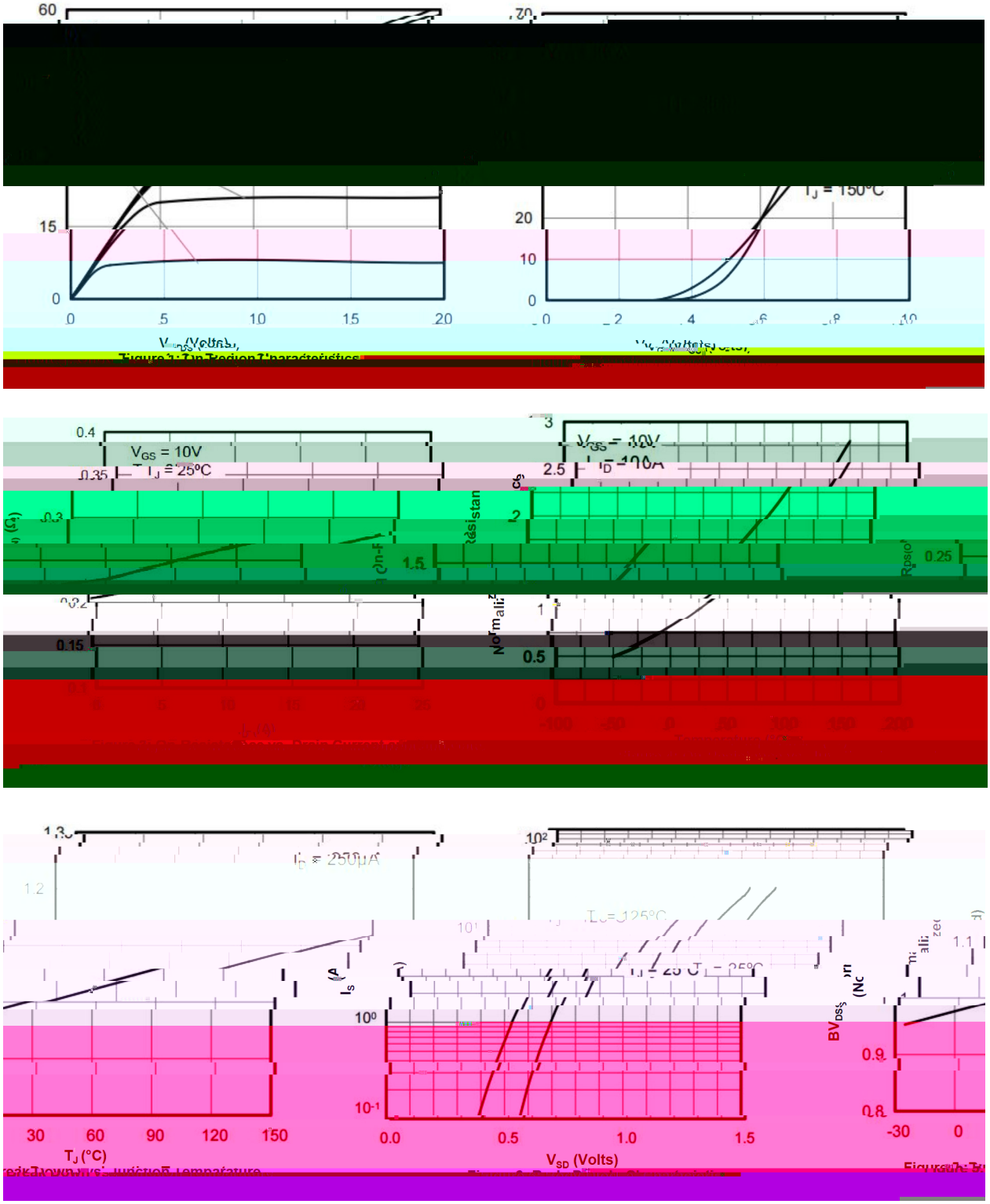
ł ʜ ↄ / Marking

See Marking Instructions.

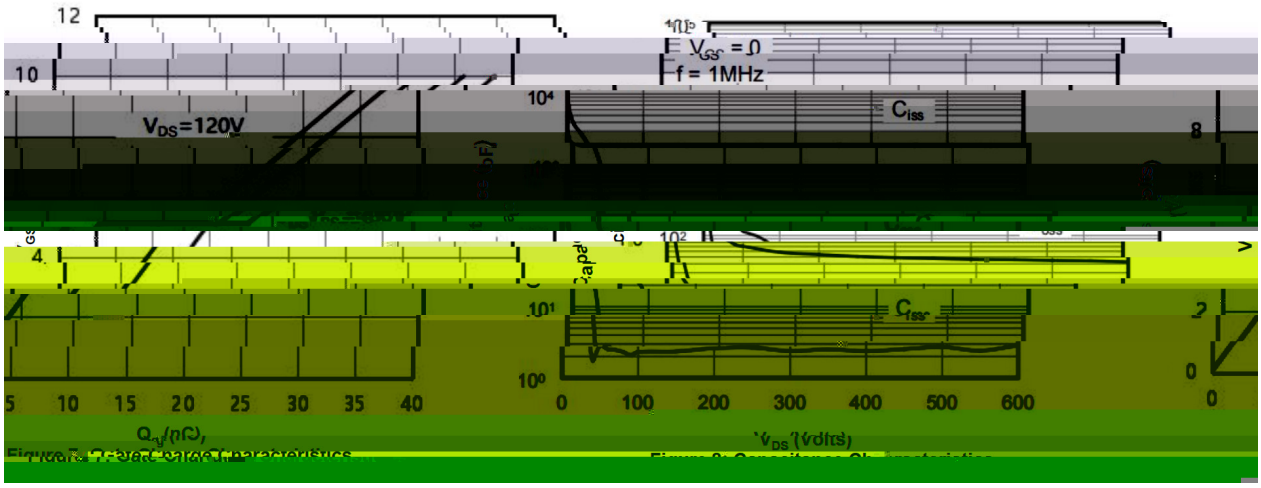
≠ ∧ ∃ Ạ / Electrical Characteristics(Ta=25 ⊿)

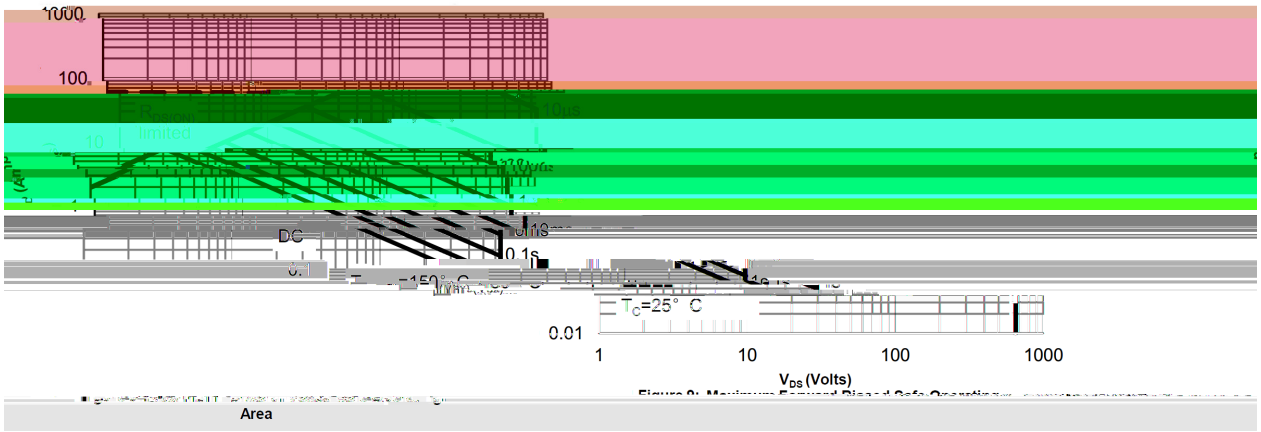
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Continuous Diode Forward Current	I_S			20		A
Total Gate Charge	Q_g	V_{DS}=480V I_D=10A V_{GS}=10V		38.2		nC
Gate-Source Charge	Q_{gs}			10		nC
Gate-Drain Charge	Q_{gd}			13		nC
Reverse recovery time	t_{rr}	V_R=400 V, I_F=10A, dI_F/dt=100 A/ s		340		ns
Reverse recovery charge	Q_{rr}			6.7		uC

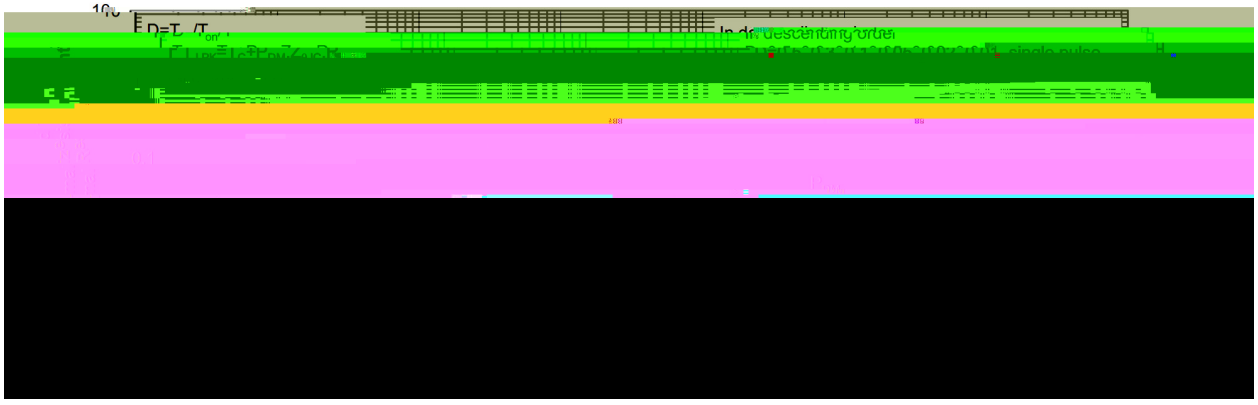
≠ Ǝ ÃΈ Ѵ ƒ / Electrical Characteristic Curve



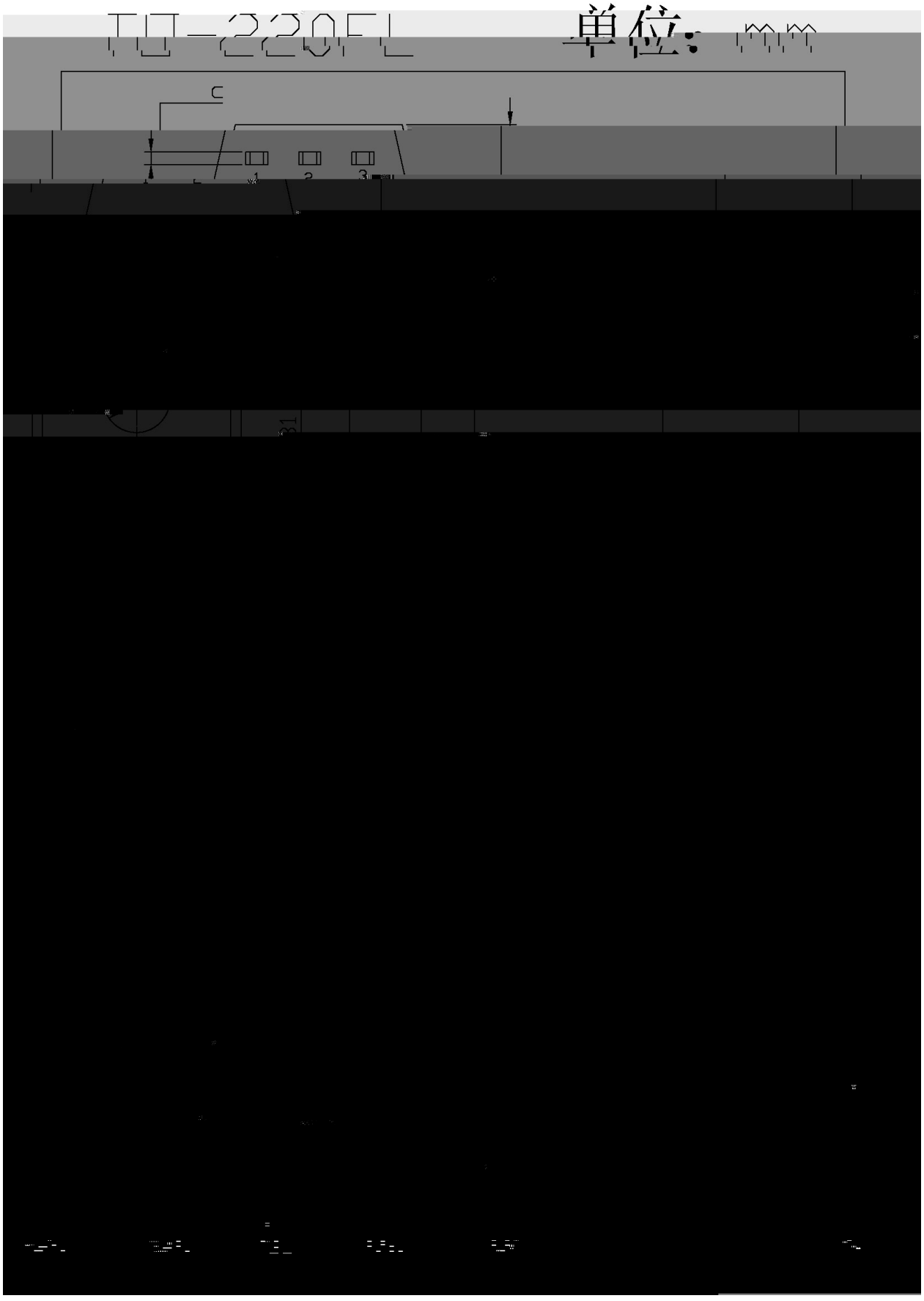
≠ Ǝ ÃʹE ∀ ƒ / Electrical Characteristic Curve



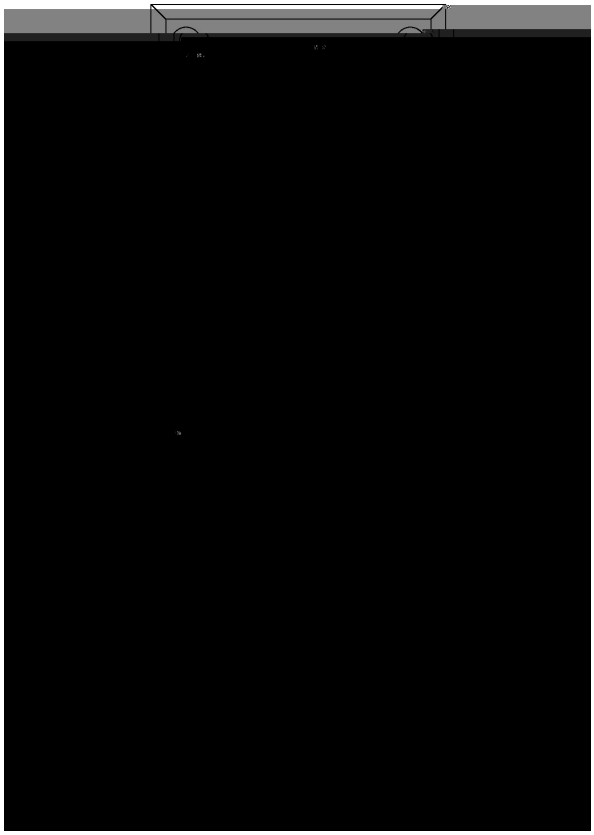




ᵘ ĖÒĻ ʃ / Package Dimensions



ł. Ļ"Ω / Marking Instructions



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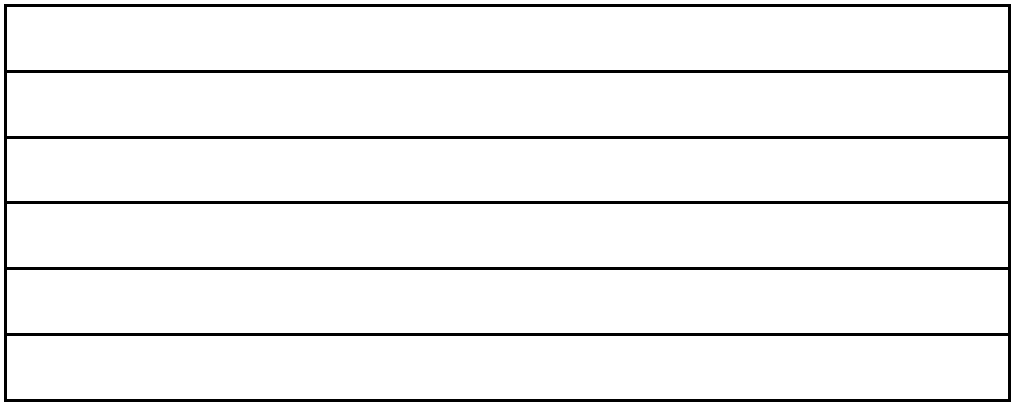
65R190C

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Note:

BR:	Company Code
65R190C:	Product Type Code
****:	Lot No. Code, code change with Lot No

↓ ș ╕ẅ´E ᛋ ƒ (ᾠ ᴈ) / Temperature Profile for Dip Soldering(Pb-Free)



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

ᆡ ŭ ɋ ˉ`Y Ţ / Resistance to Soldering Heat Test Conditions

270±5	10±1 sec.	Temp.:270±5	Time:10±1 sec

ɒ Ŀ ᵪ— / Packaging SPEC.

/ TUBE