2SD2061
Rev.E Mar.-2016

DATA SHEET

/ Descriptions

WR0553I ṂṂ Ŀ QSQ ÆṀ ɥ s Ⅱ ᒣ Silicon NPN transistor in a TO-220F Plastic Package.

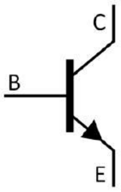
/ Features

Ḩ ب ᵓ я ن / Ⅱ Ḅ ╙ ͻ ╙ ɰ ` ꞊ ớ /S_F@63 Z / Ḵ Ḡ ২ Ṫ Ă ת
Low $V_{CE(sat)}$,excellent DC current gain characteristics, P_C=30W,wide SOA.

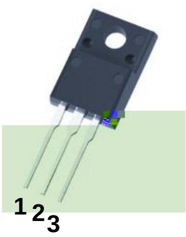
/ Applications

General Purpose Power Amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 χ Base PIN 2 χ Collector PIN 3 χ Emitter

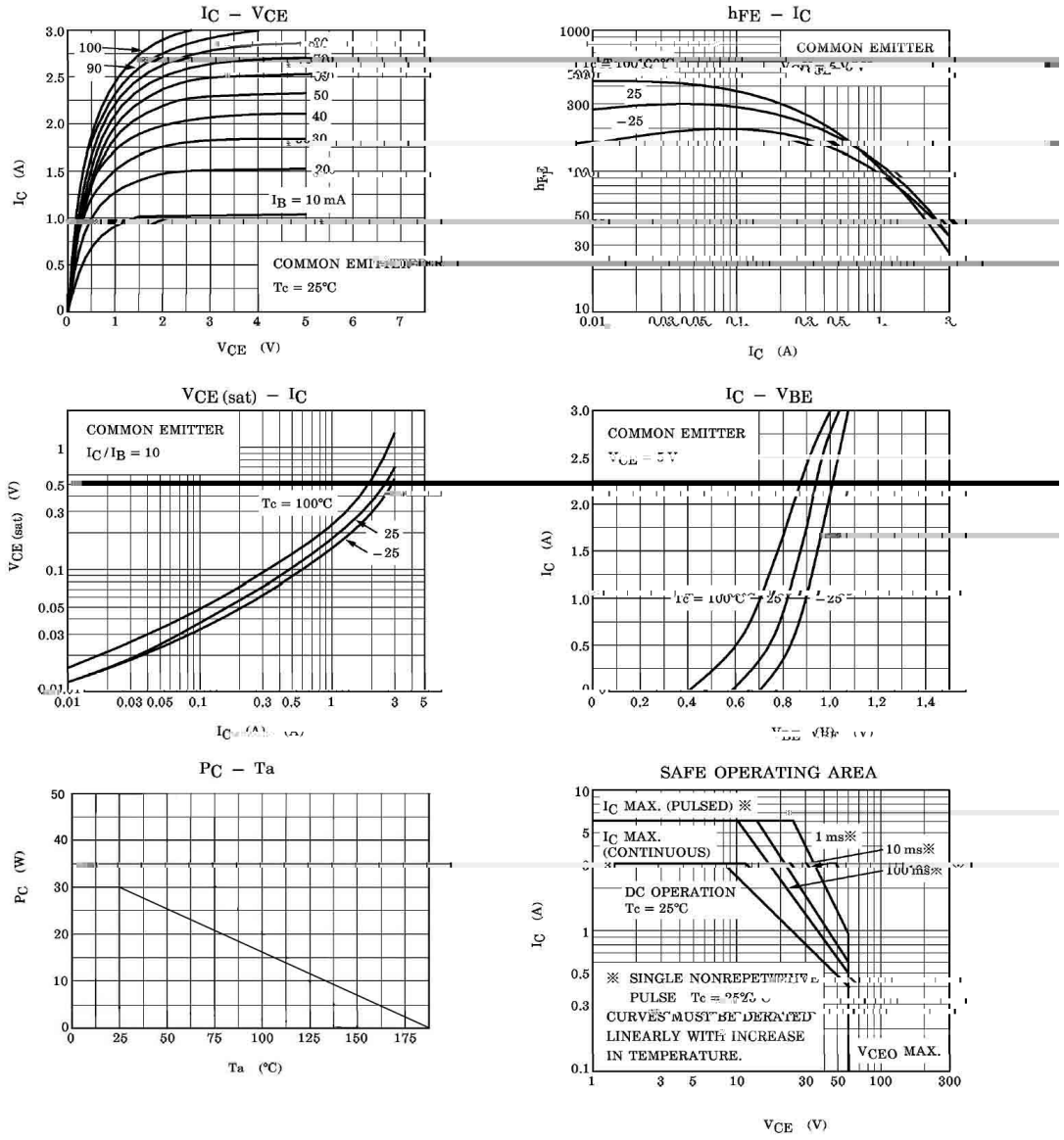
/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	E	F
h_{FE} Range	100 200	160 320

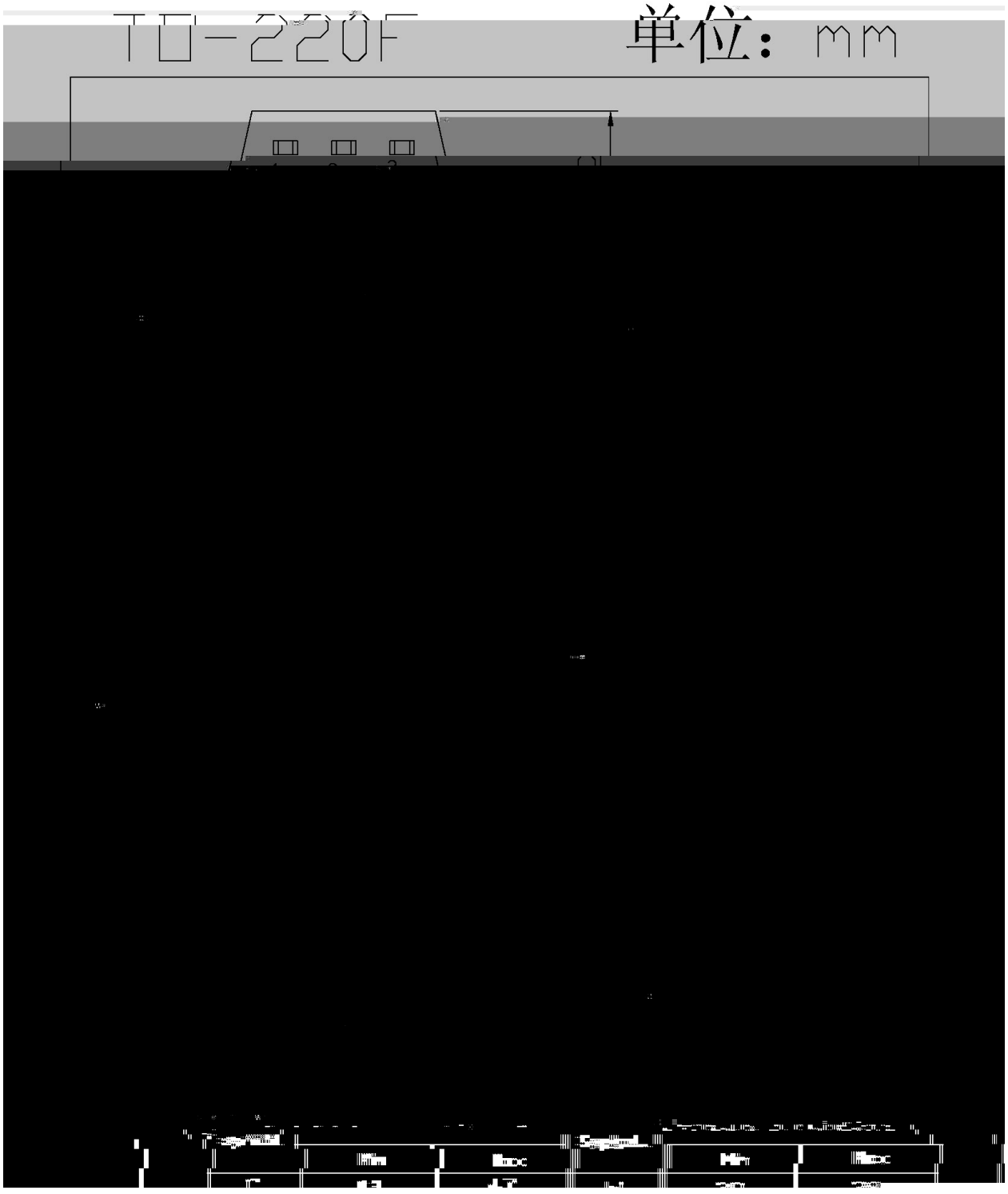
v ̈Ω Parameter	ϒ N Symbol	̈Ω Ö Rating	D Ч Unit
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	3.0	A
Peak Collector Current	I_{CM}	6.0	A
Collector Power Dissipation	P_C	2.0	W
Collector Power Dissipation	P_C(Tc=25)	30	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

v ̈Ω Parameter	ϒ N Symbol	Ш ː ϯ Ţ Test Conditions	ώ ṇ Ö Min	Ɛ ʒ Ö Typ	ώ ᶻ Ö Max	D Ч Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=50 A	80			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA	60			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=50 A	5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=60V I_E=0			10	A
Emitter Cut-Off Current	I_{EBO}	V_{EB}=4.0V I_C=0			10	A
DC Current Gain	h_{FE}	V_{CE}=5.0V I_C=500mA	100		320	

/ Electrical Characteristic Curve



/ Package Dimensions



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

ب ˝ χ

1 ỉ ♬ □ ẙ 25 Ḱ 150 ɫ ı ʽH ڗ 60 Ḱ 90sec;

2 Ŝ Ӫ □ ẙ 255°5 ɫ ı ʽH ڗ ʽY ꟻ ㎒ 5°0.5sec;

3 ì˙ ˥˛ ɔ ๑ ẙ ㎒ 2 Ḱ 10 ɫ /sec.

Note:

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

2.Peak Temp.:255°5 ɫ , Duration:5°0.5sec.

3. Cooling Speed: 2~10 ɫ /sec.

/ Resistance to Soldering Heat Test Conditions

□ ẙ χ 270°5 ɫ ʽH ڗ χ 10°1 sec.

Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

ʽΏ ʈ ɣ ԏ / BULK

Package Type	Units					Dimension (unit mm^3)		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195