

/ Descriptions

WR0553I ММ Ё QSQ Æ М ы s ll 1 Silicon NPN transistor in a TO-220F Plastic Package.

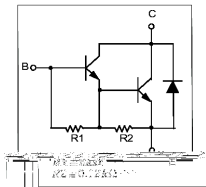
/ Features

ЛЪ WLS45: I Ы ´
Complement to TIP127F.

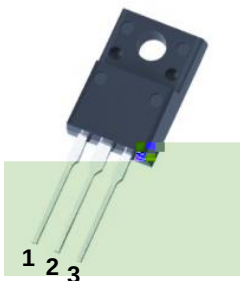
/ Applications

Љˆˆ А I ' ı Ó Æ H ˆ ˆ ˆ
Medium power linear switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 χ Base PIN 2 χ Collector PIN 3 χ Emitter

/ h_{FE} Classifications & Marking

Ѓ M ı ˆ ˆ ˆ See Marking Instructions.

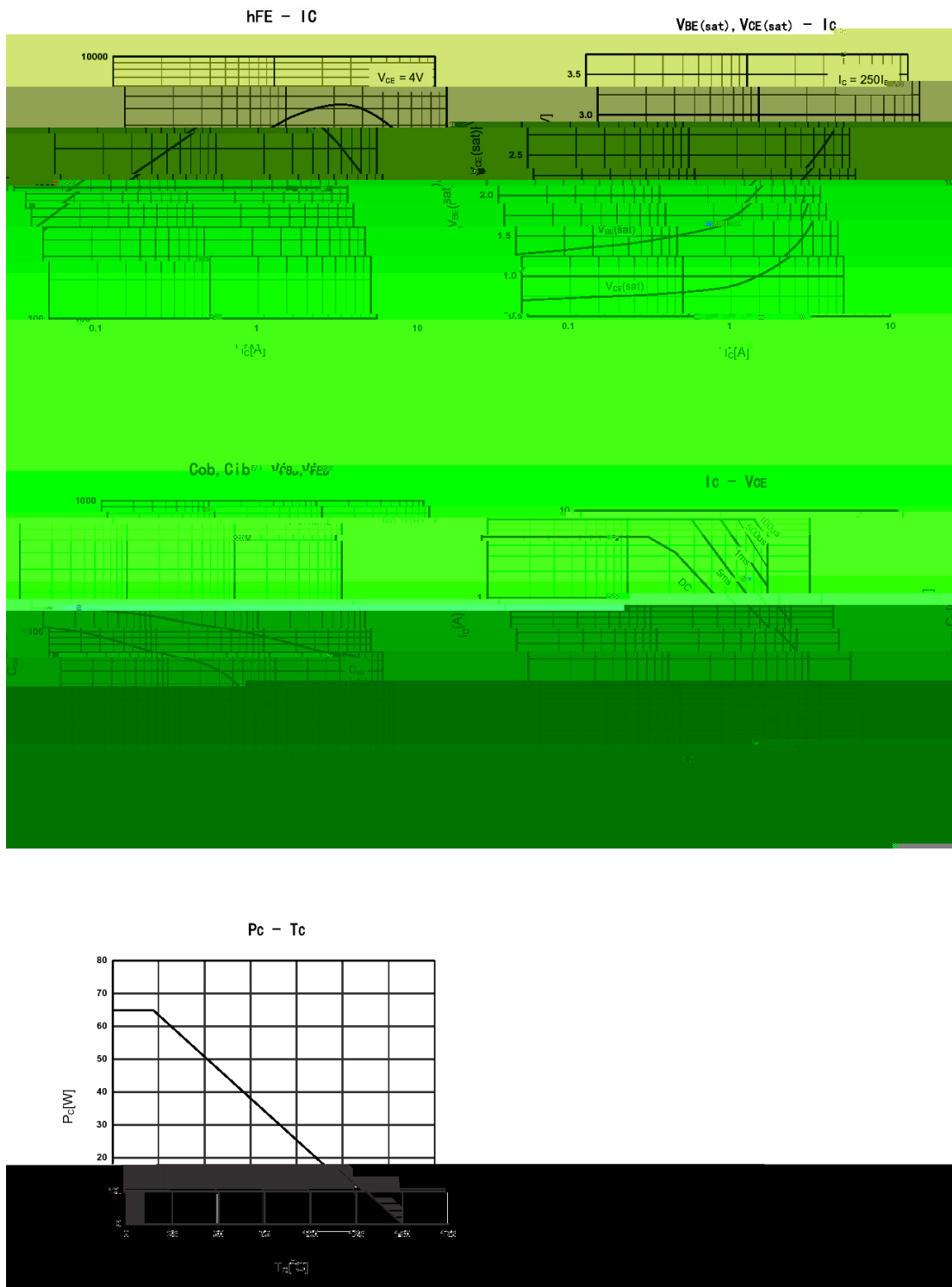
/ Absolute Maximum Ratings(Ta=25 °C)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	100	V
Collector to Emitter Voltage	V_{CEO}	100	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	5.0	A
Collector Current – Continuous(Pulse)	I_{CP}	8.0	A
Base Current	I_B	120	mA
Collector Power Dissipation	P_C	2.0	W
	$P_C(T_C=25^\circ\text{C})$	60	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 ~ 150	

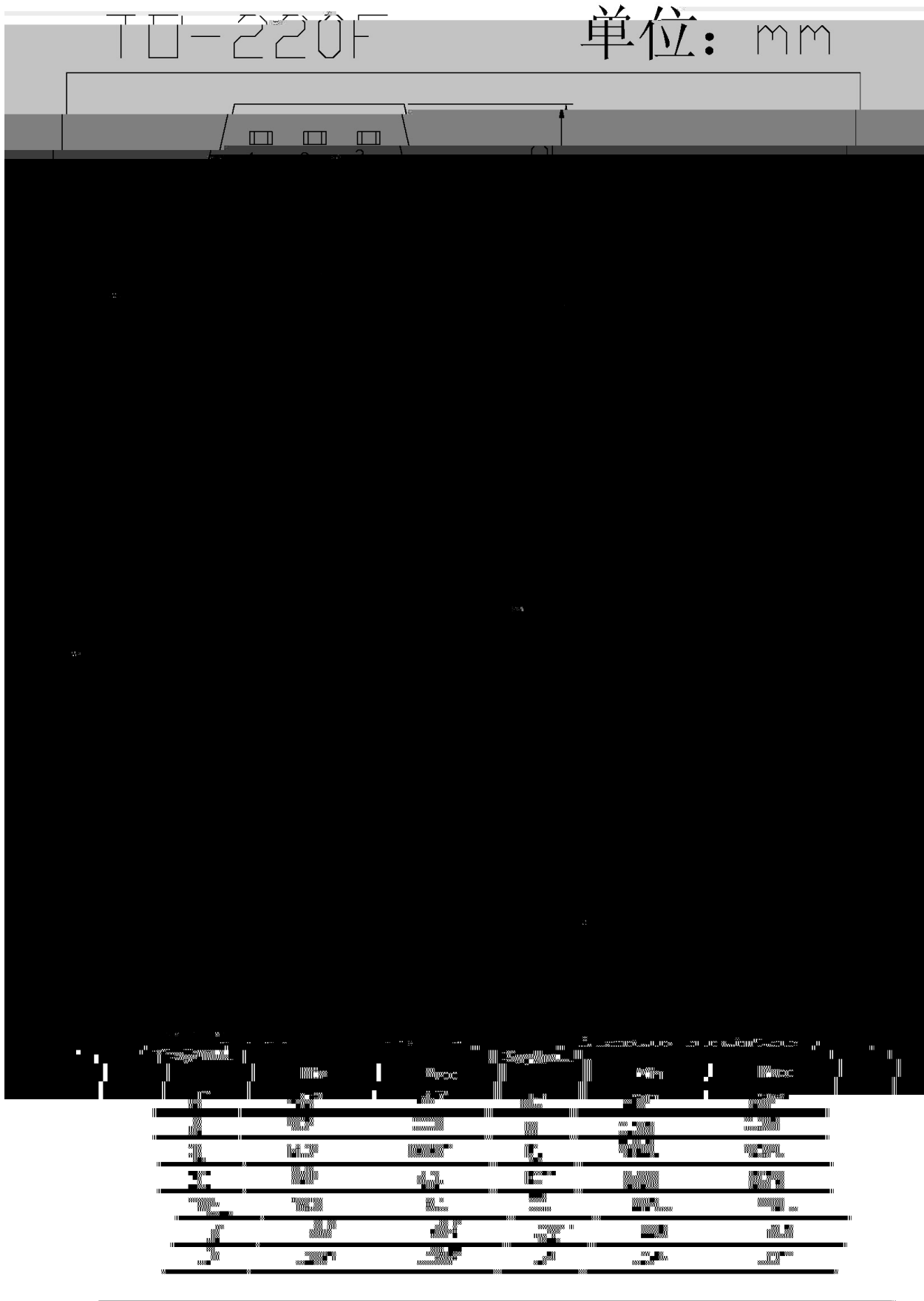
/ Electrical Characteristics(Ta=25 °C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=100\text{mA}$ $I_B=0$	100			V
Collector Cut-Off Current	I_{CEO}	$V_{CE}=50\text{V}$ $I_B=0$			0.5	mA
Collector Cut-Off Current	I_{CBO}	$V_{CB}=100\text{V}$ $I_E=0$			0.2	mA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0\text{V}$ $I_C=0$			2.0	mA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=3.0\text{V}$ $I_C=0.5\text{A}$	1000			
	$h_{FE(2)}$	$V_{CE}=3.0\text{V}$ $I_C=3.0\text{A}$	1000			
Collector to Emitter Saturation Voltage	$V_{CE(sat)(1)}$	$I_C=3.0\text{A}$ $I_B=12\text{mA}$			2.0	V
	$V_{CE(sat)(2)}$	$I_C=5.0\text{A}$ $I_B=20\text{mA}$			4.0	V
Base to Emitter Voltage	V_{BE}	$I_C=3.0\text{A}$ $V_{CE}=3.0\text{V}$			2.5	V
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}$ $I_E=0$ $f=0.1\text{MHz}$			200	pF

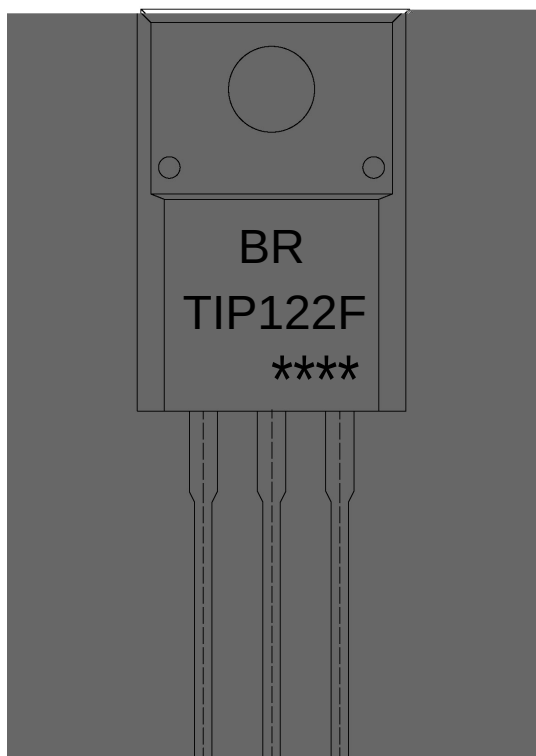
/ **Electrical Characteristic Curve**



/ Package Dimensions



/ Marking Instructions



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BR

公司代码

TIP122F

产品代码

批次代码 1 4 1 5 6 7 8 9 0

Note:

BR:

Company Code.

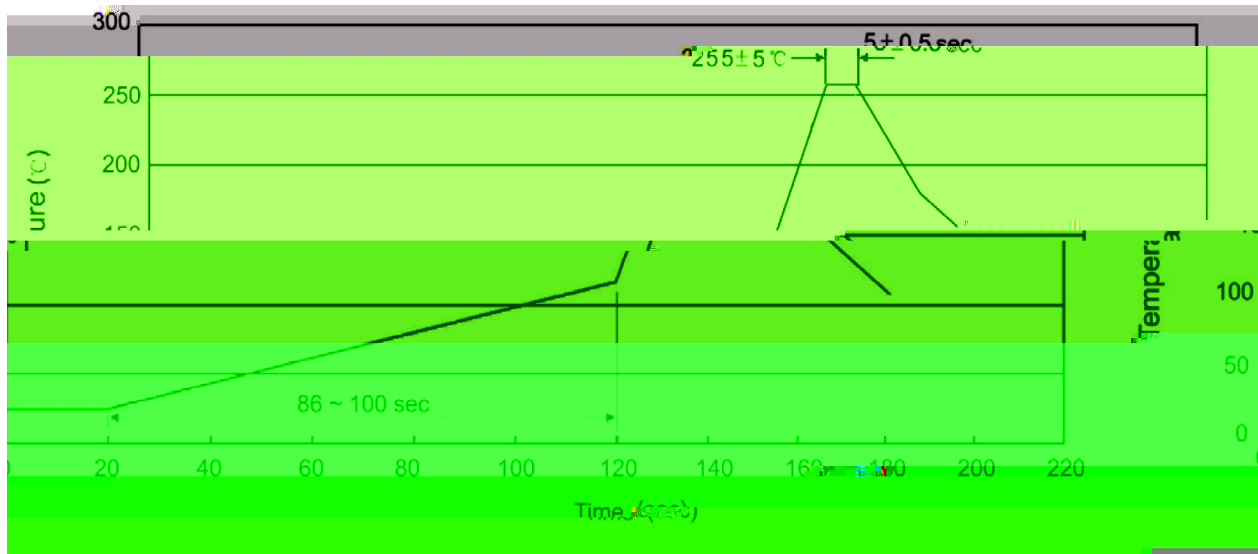
TIP122F:

Product Type Code.

****:

Lot No. Code, code change with Lot No.

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



说明

1. 预加热: 25~150 °C, Time: 60~90sec;
2. 峰值温度: 255±5 °C, Time: 5±0.5sec;
3. 冷却速度: 2~10 °C/sec.

Note:

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

/ Resistance to Soldering Heat Test Conditions

温度: 270±5 °C 时间: 10±1 sec. Temp: 270±5 Time: 10±1 sec

/ Packaging SPEC.

散装 / 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-220F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

管装 / TUBE

Package Type	Units					Dimension (unit: mm ³)		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-220F	50	20	1,000	5	5,000	532×31.4×5.5	5re124.9	