/ Descriptions

Silicon NPN transistor in a TO-220F Plastic Package.

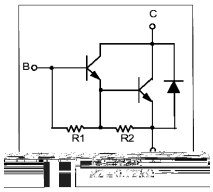
/ Features

Complement to TIP127F.

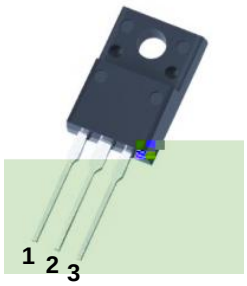
/ Applications

Medium power linear switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

See Marking Instructions.

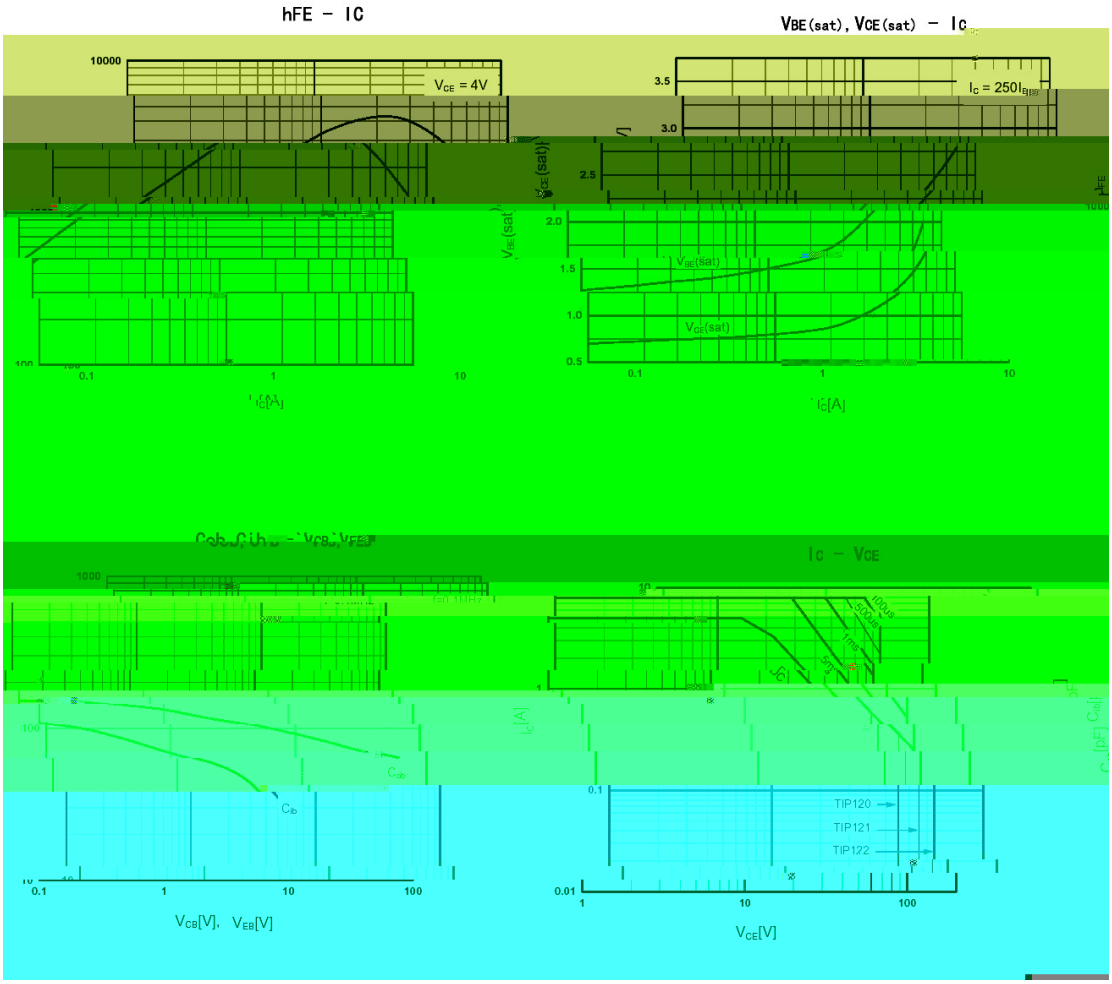
/ Absolute Maximum Ratings(Ta=25)

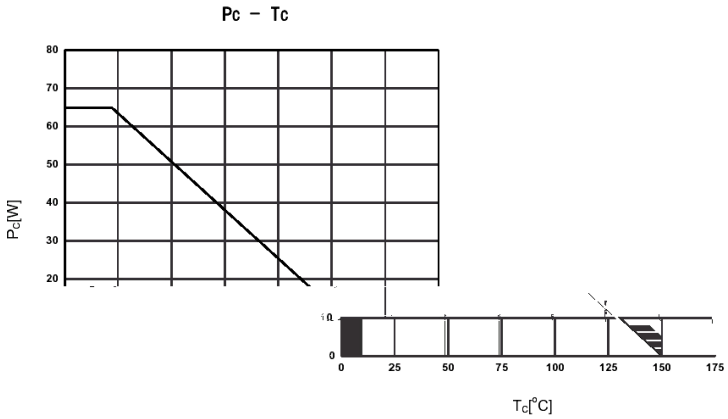
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	100	V
Collector to Emitter Voltage	V_{CEO}	100	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	5.0	A
Collector Current – Continuous(Pulse)	I_{CP}	8.0	A
Base Current	I_B	120	mA
Collector Power Dissipation	P_C	2.0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

/ Electrical Characteristics(Ta=25)

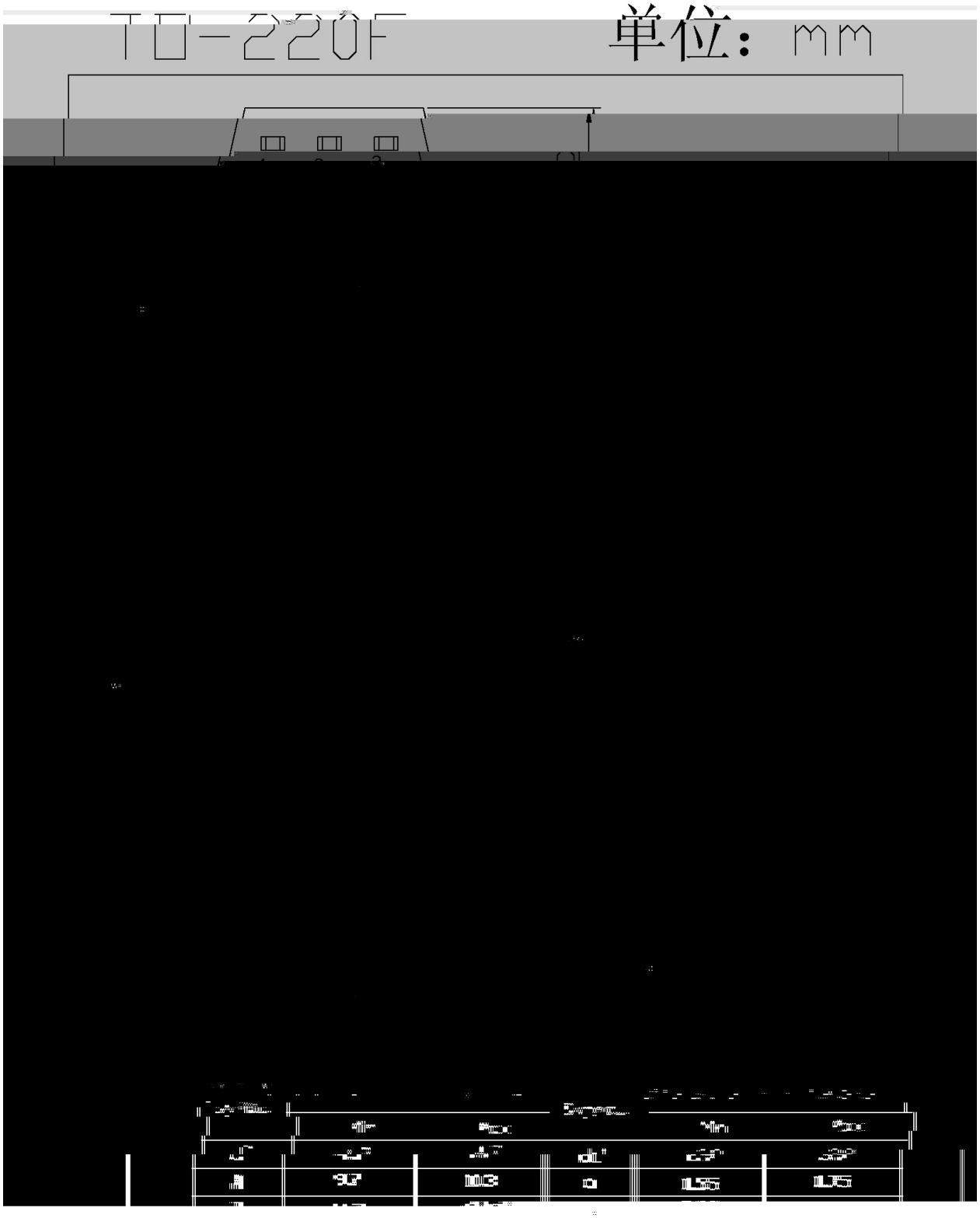
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=100mA I_B=0	100			V
Collector Cut-Off Current	I_{CEO}	V_{CE}=50V I_B=0			0.5	mA
Collector Cut-Off Current	I_{CBO}	V_{CB}=100V I_E=0			0.2	mA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=5.0V I_C=0			2.0	mA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

/ Electrical Characteristic Curve

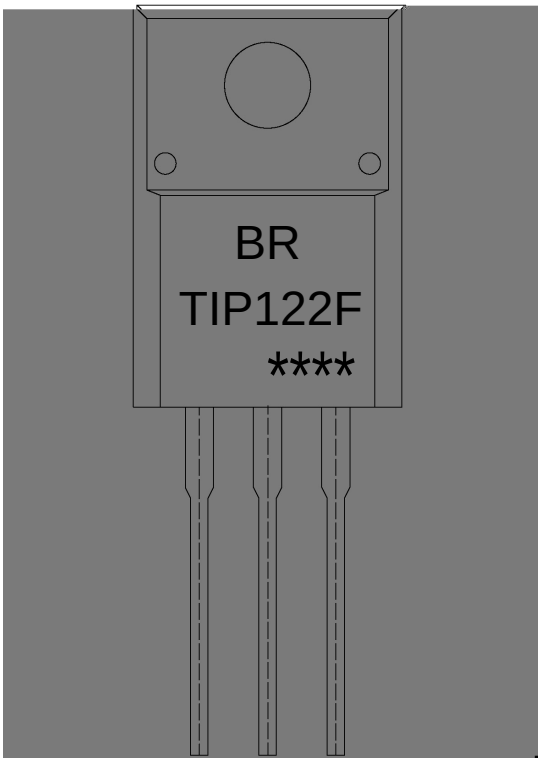




/ Package Dimensions



/ Marking Instructions



BR

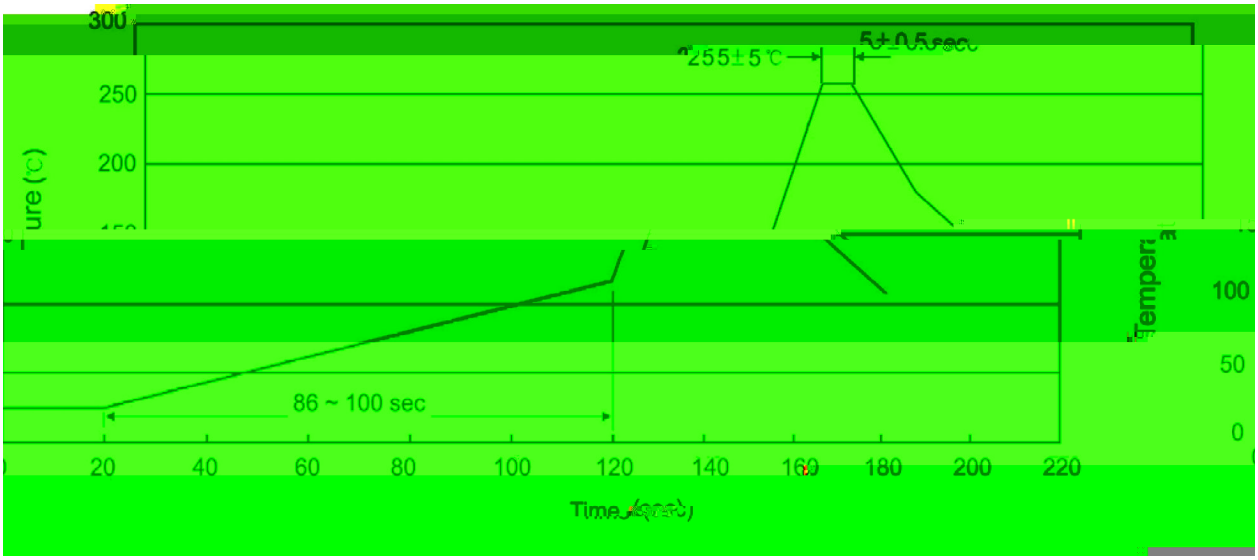
TIP122F

****

Note:

BR:	Company Code.
TIP122F:	Product Type Code.
****:	Lot No. Code, code change with Lot No.

( ) / 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.	

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ BULK

Package Type	Units					Dimension		(unit mm3)
	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

/ TUBE

Package Type	Units					Dimension		(unit mm3)
	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	5ref1 24.9	