

/ Descriptions

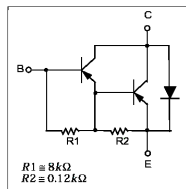
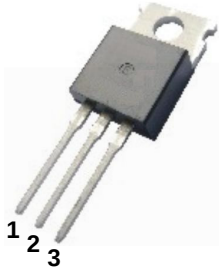
Silicon PNP transistor in a TO-220 Plastic Package.

/ Features

Complement to TIP122.

/ Applications

Medium power linear switching applications.

/ Equivalent Circuit**/ Pinning**

PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

See Marking Instructions.

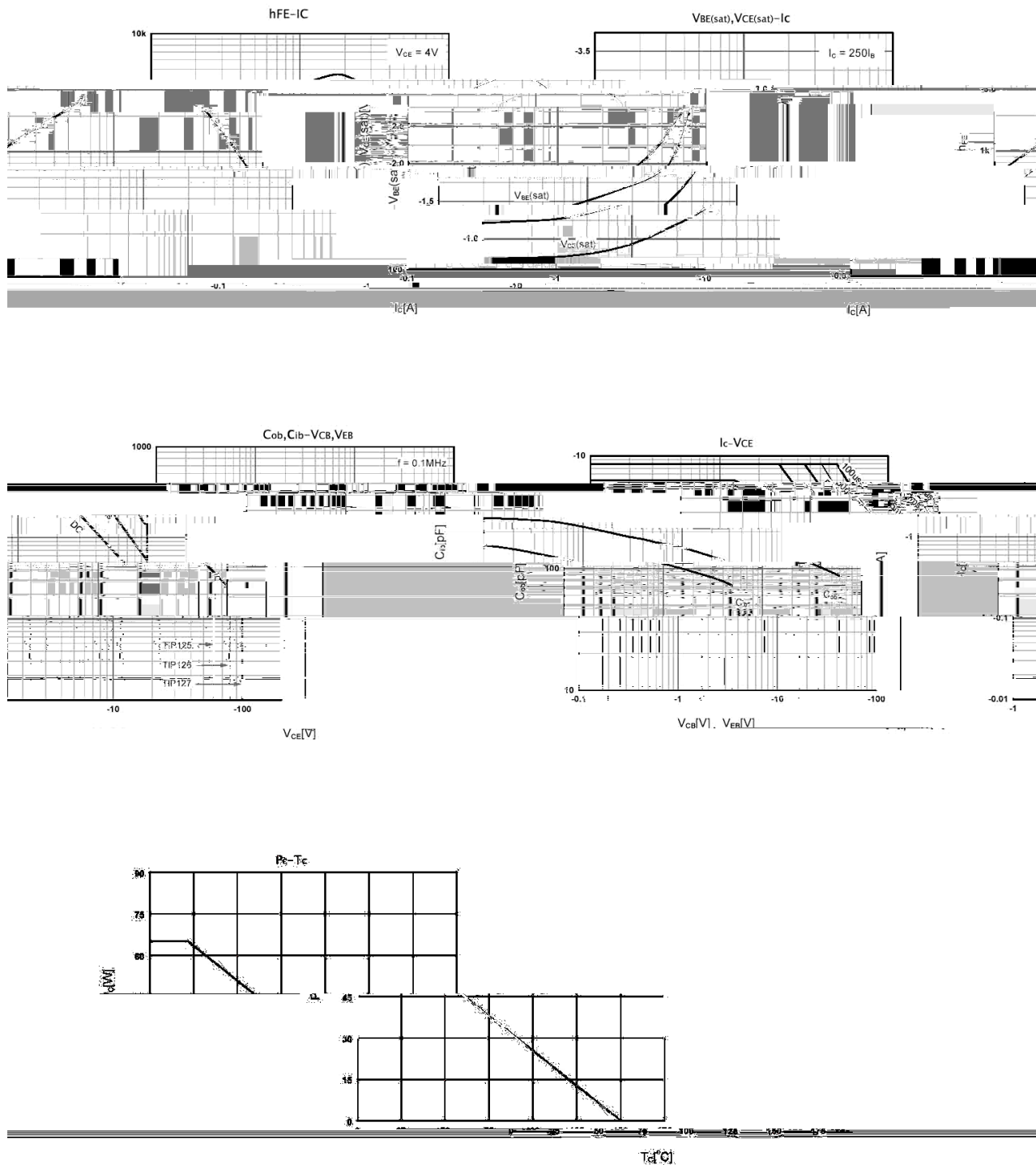
/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

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
Peak Collector Current	I_{CP}	-8.0	A
Base Current - Continuous	I_B	-120	mA
Collector Power Dissipation	P_C	2.0	W
	$P_C(T_c=25^\circ\text{C})$	65	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

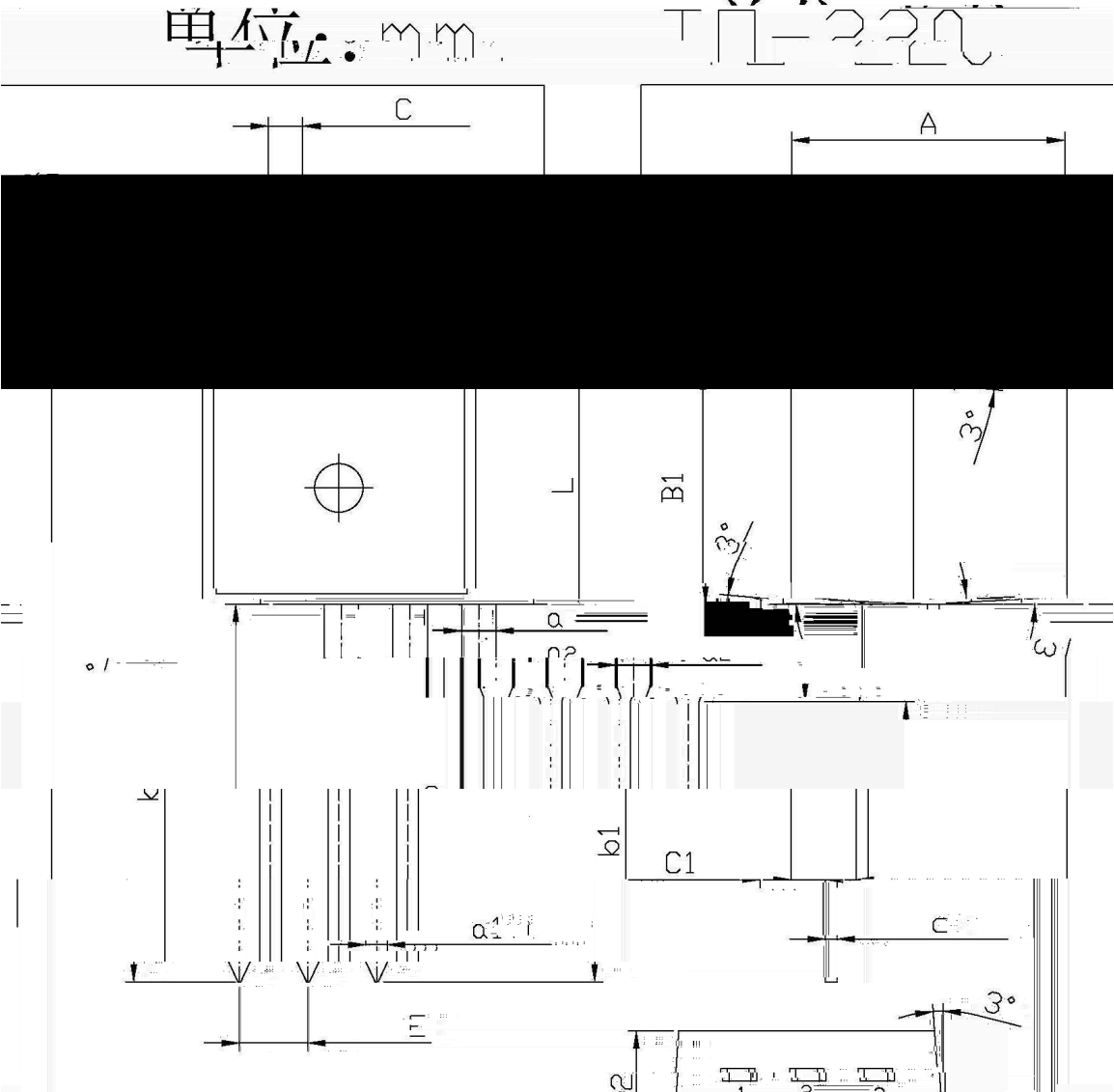
/ Electrical Characteristics($T_a=25^\circ\text{C}$)

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}	$V_{CE}=-50\text{V}$ $I_B=0$			-2.0	mA
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-100\text{V}$ $I_E=0$			-1.0	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}	$V_{CB}=-10\text{V}$ $I_E=0$ $f=0.1\text{MHz}$			300	pF

/ Electrical Characteristic Curve

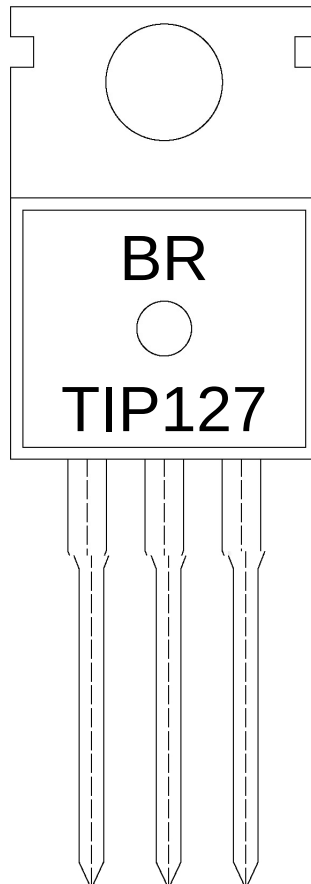


/ Package Dimensions



Dimensions in Millimeters			Dimensions in Millimeters		
Symbol	Min	Max	Symbol	Min	Max
A	9.8	10.2	C	1.2	1.4
B	3.56	3.64	B1	6.3	6.7
B1	9.0	9.4	C1	15.7	16.1
C	2.2	2.6	C1	12.6	13.0

/ Marking Instructions



BR

TIP127

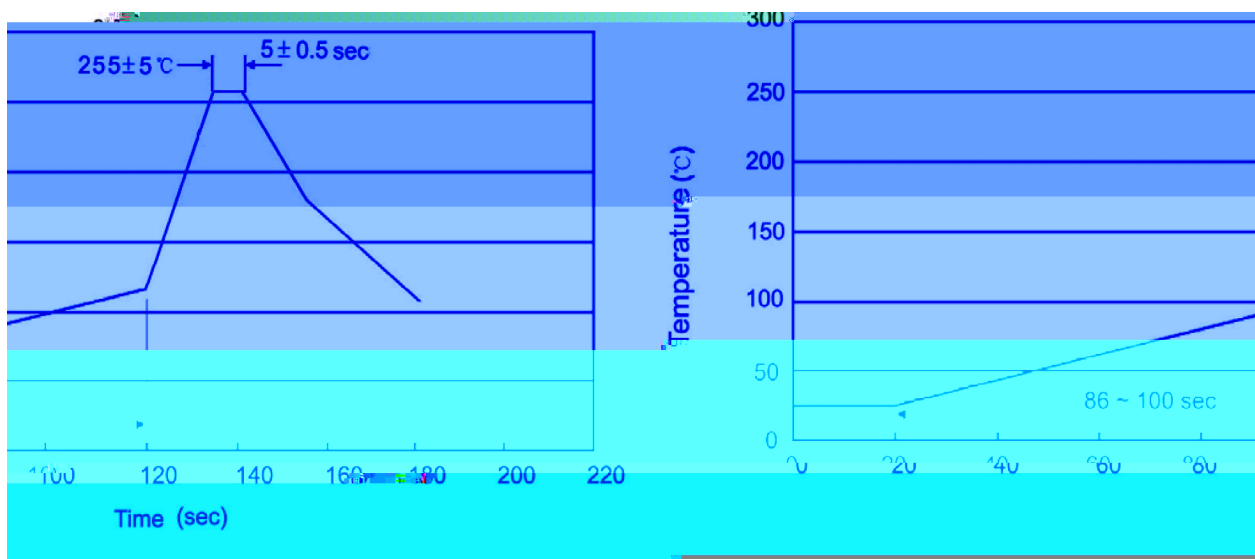
Note:

BR: Company Code

TIP127: Product Type.

***: Lot No. Code, code change with Lot No.

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



Note:

- 1 25 150 60 90sec;
- 2 255 5 5 0.5sec;
- 3 2 10 /sec.

- 1.Preheating:25~150 , Time:60~90sec.
- 2.Peak Temp.:255 5 , Duration:5 0.5sec.
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 mm ³)

/ TUBE

Package Type	Units					Dimension		(unit mm ³)

/ Notices