

/ Descriptions

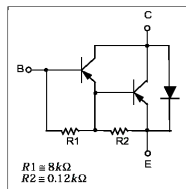
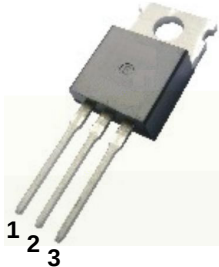
Silicon PNP transistor in a TO-220 Plastic Package.

/ 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.

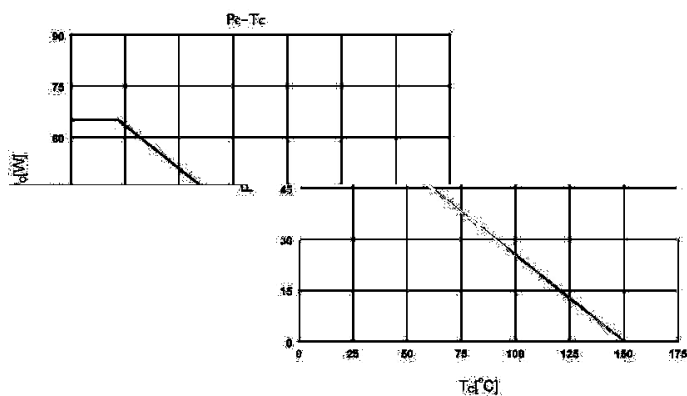
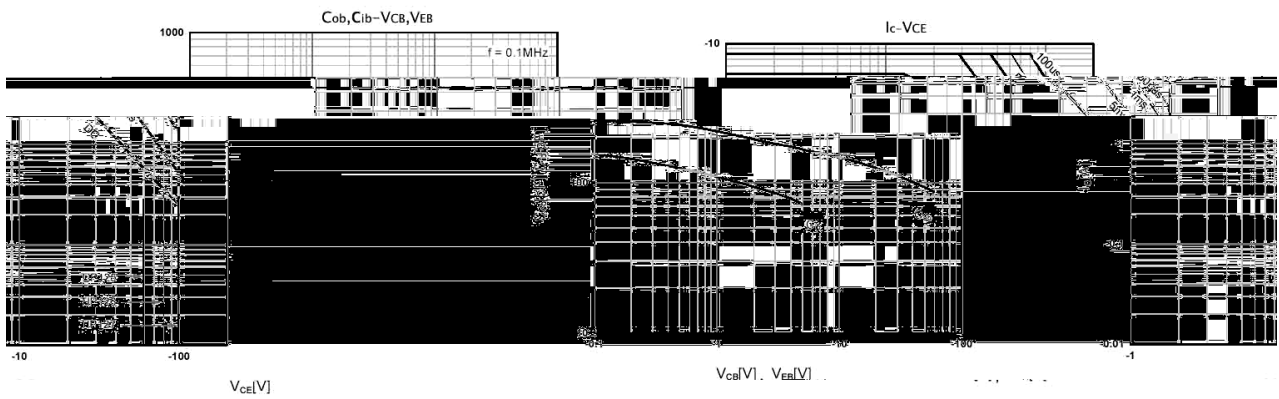
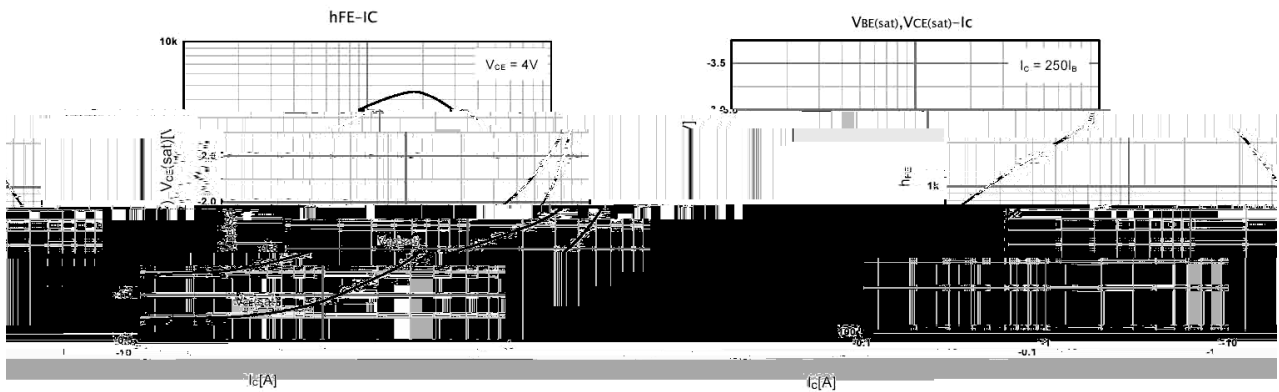
/ Absolute Maximum Ratings(Ta=25)

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

/ Electrical Characteristics(Ta=25)

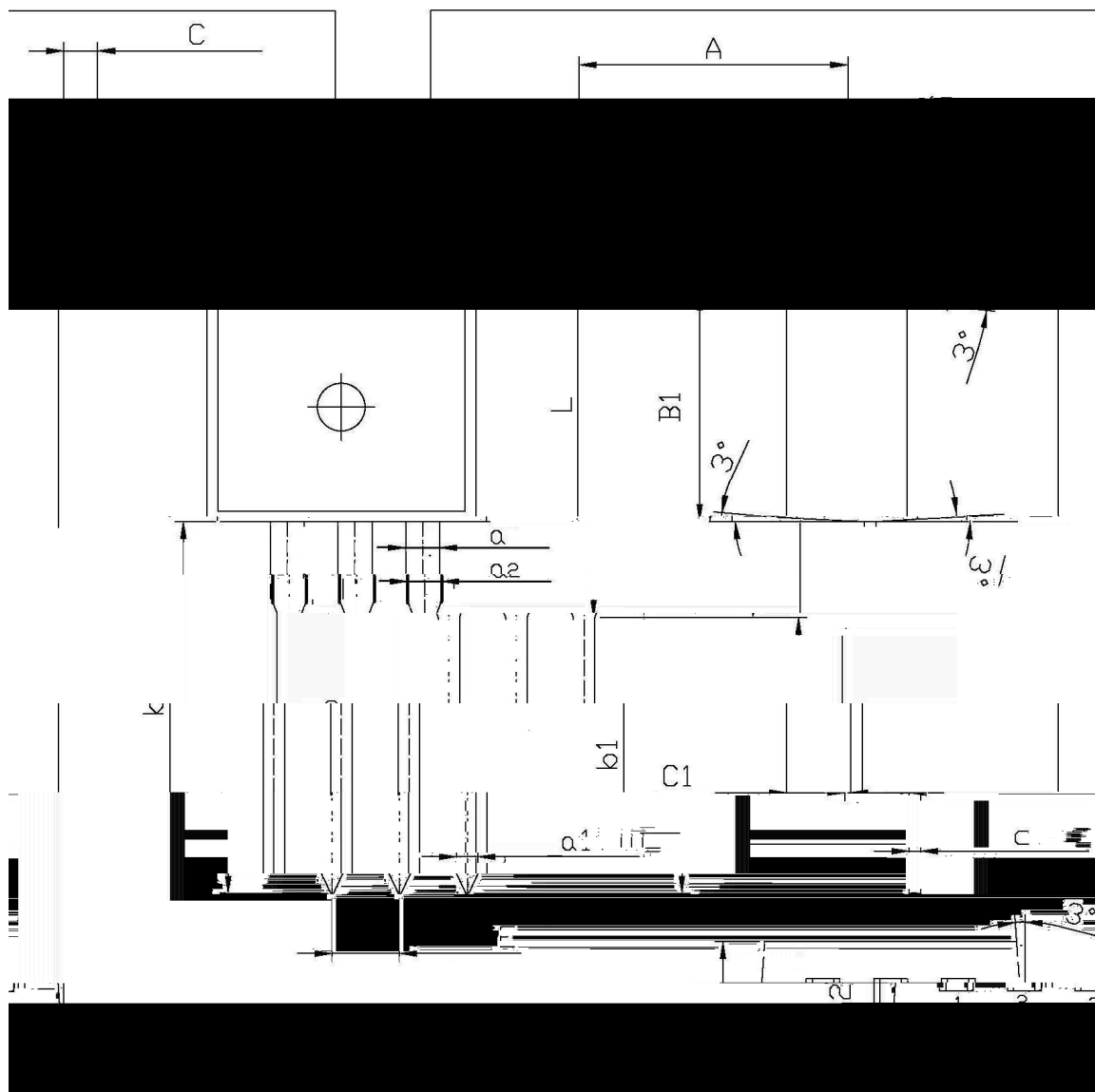
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-100mA$ $I_B=0$	-100			V
Collector Cut-Off Current	I_{CEO}	$V_{CE}=-50V$ $I_B=0$			-2.0	mA
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-100V$ $I_E=0$			-1.0	mA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-5.0V$ $I_C=0$			-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}	$V_{CB}=-10V$ $I_E=0$ $f=0.1MHz$			300	pF

/ Electrical Characteristic Curve



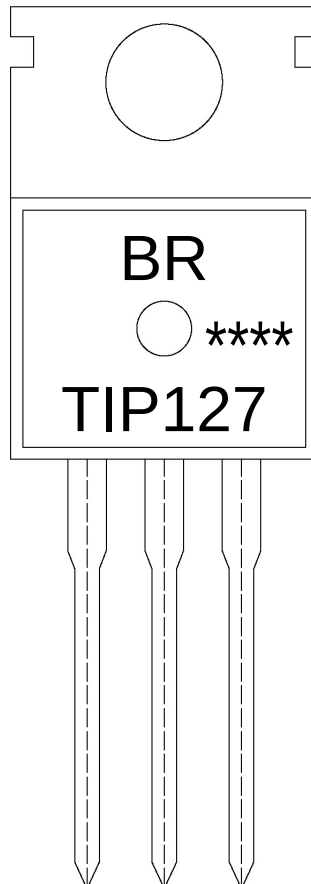
/ Package Dimensions

单位: mm TO-220 E



Symbol	Dimensions in Millimeters		Symbol	Dimensions in Millimeters	
	Min	Max		Min	Max
A	9.8	16.2	C	1.2	1.4
B	15.7	16.1	B1	12.8	13.6
a	1.22	1.3	a1	2.34	2.7
a2	1.25	1.4			
C1	0.4	0.6			
C2	4.3	4.7			

/ Marking Instructions



BR

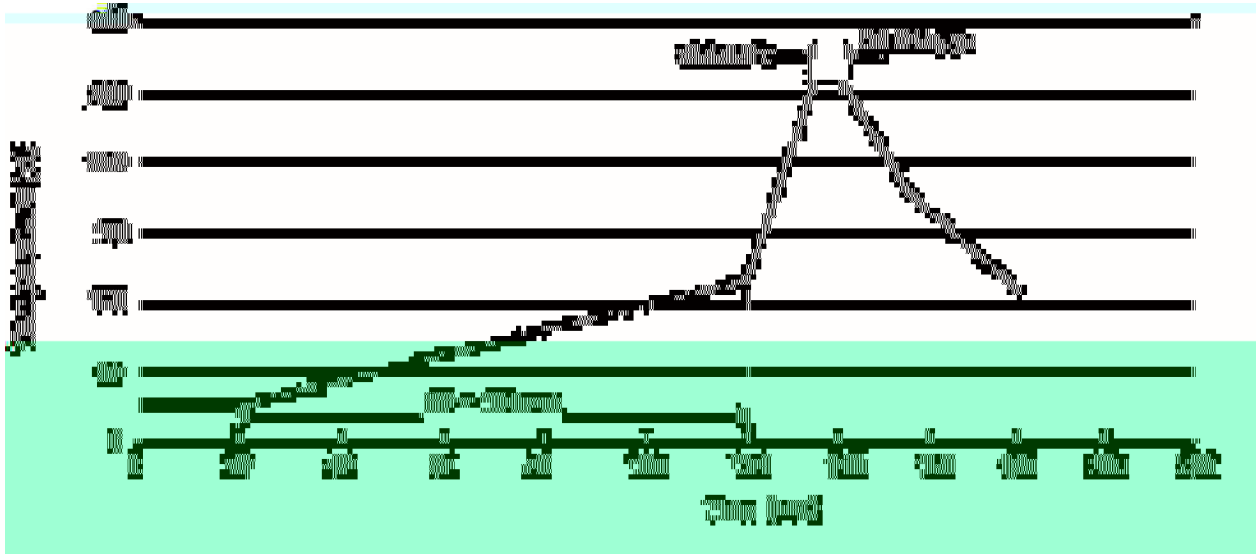
TIP127

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)		
	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

/ 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-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices