

**/ Descriptions**

TO-126F          NPN          Silicon NPN transistor in a TO-126F Plastic Package.

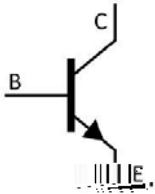
**/ Features**

High voltage, small collector output, capacitance.

**/ Applications**

High voltage switching and amplifier applications, color TV chroma output applications and, color TV horizontal driver.

**/ Equivalent Circuit**



**/ Pinning**



PIN1 Emitter          PIN 2 Collector          PIN 3 Base

**/ h<sub>FE</sub> Classifications & Marking**

- See Marking Instructions.

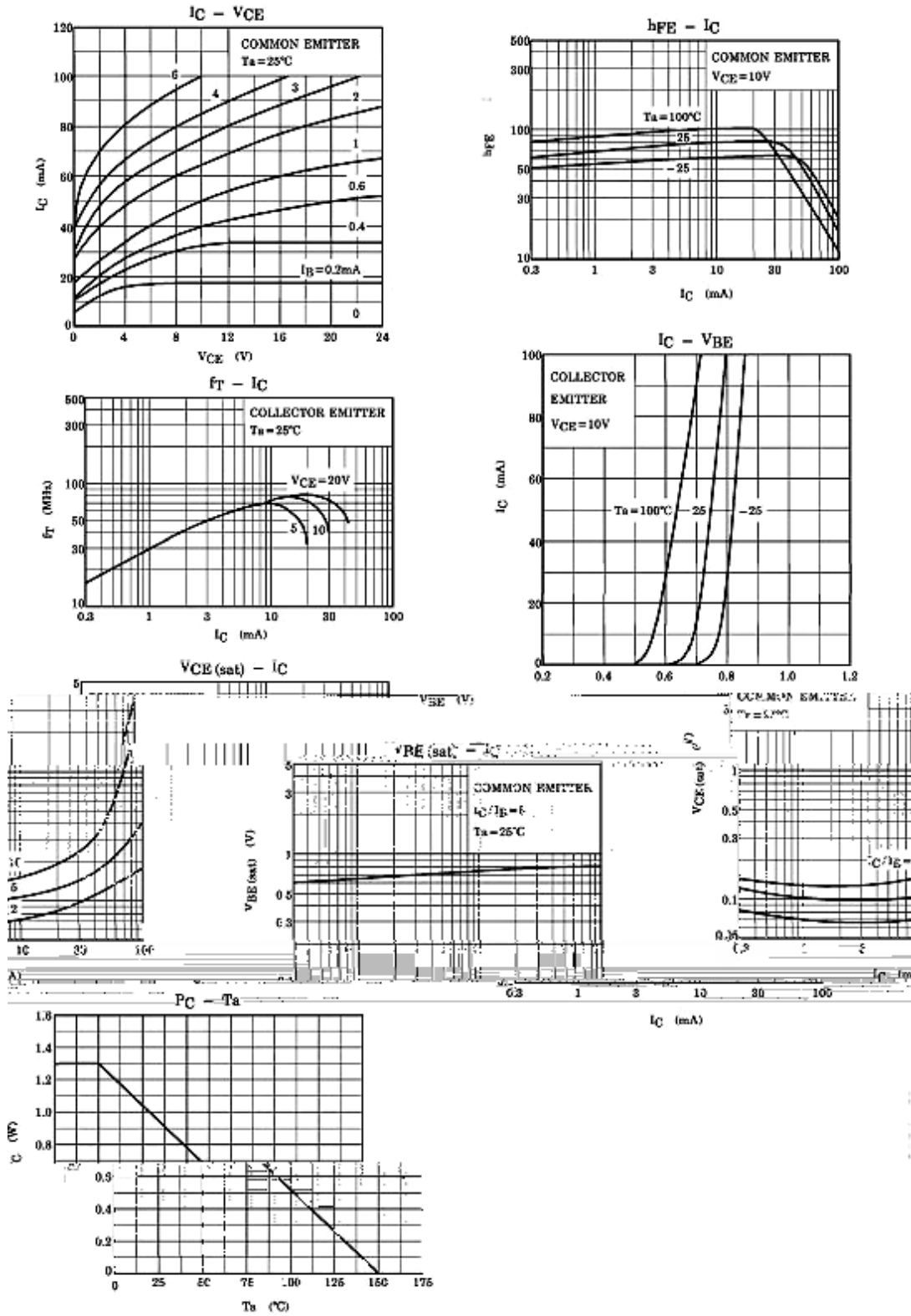
**/ Absolute Maximum Ratings(Ta=25 )**

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	300	V
Collector to Emitter Voltage	$V_{CEO}$	300	V
Emitter to Base Voltage	$V_{EBO}$	7.0	V
Collector Current - Continuous	$I_C$	100	mA
Base Current- Continuous	$I_B$	50	mA
Collector Power Dissipation	$P_C$	1.3	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 Cut-Off Current	$I_{CBO}$	$V_{CB}=240V$ $I_E=0$			1.0	A
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=7.0V$ $I_C=0$			1.0	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=10V$ $I_C=20mA$	30		200	
	$h_{FE(2)}$	$V_{CE}=10V$ $I_C=4.0mA$	20			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA$ $I_B=1.0mA$			1.0	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=10mA$ $I_B=1.0mA$			1.0	V
Transition Frequency	$f_T$	$V_{CE}=10V$ $I_C=20mA$	50	70		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=20V$ $f=1.0MHz$ $I_E=0$		3.0		pF

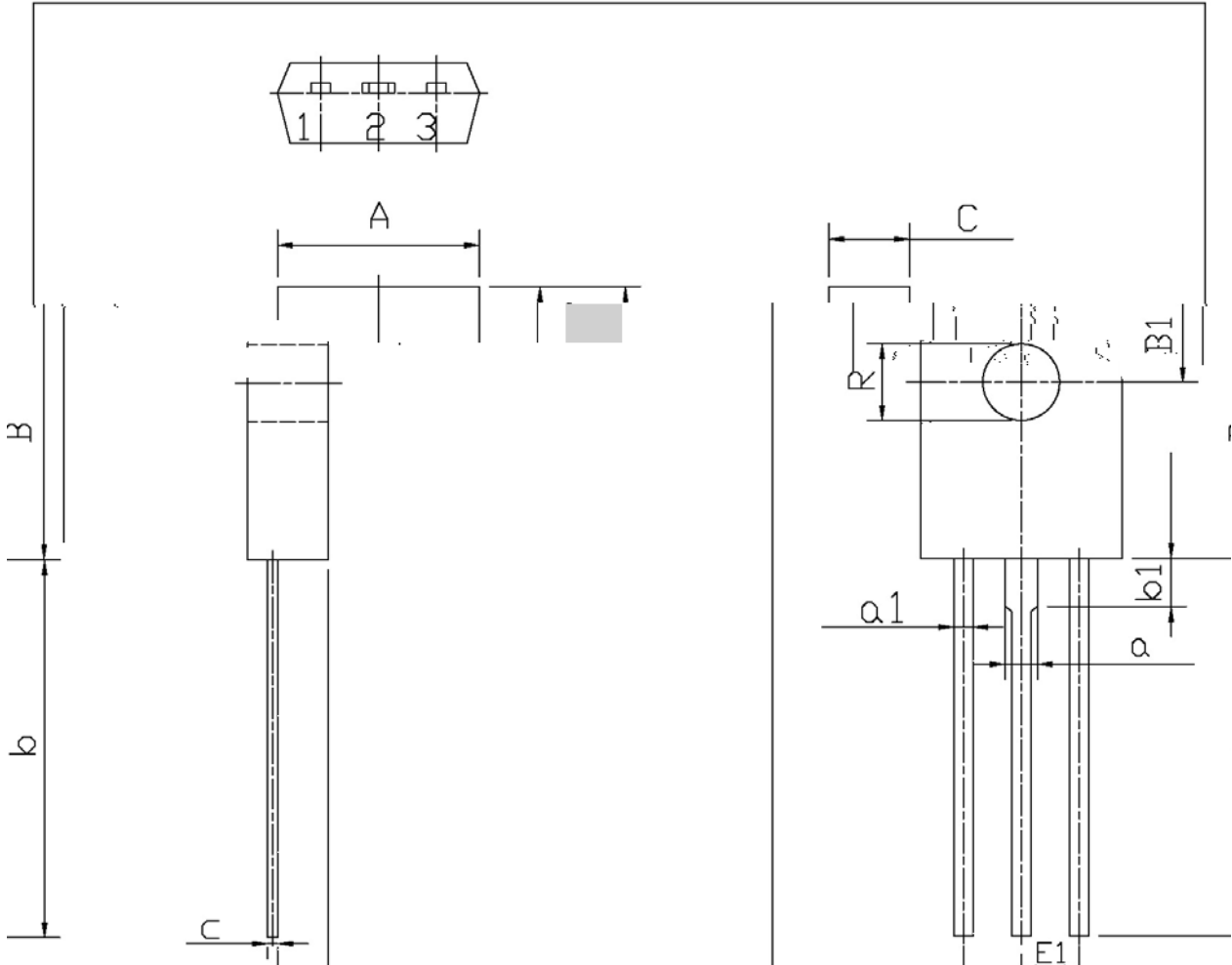
/ Electrical Characteristic Curve



/ Package Dimensions

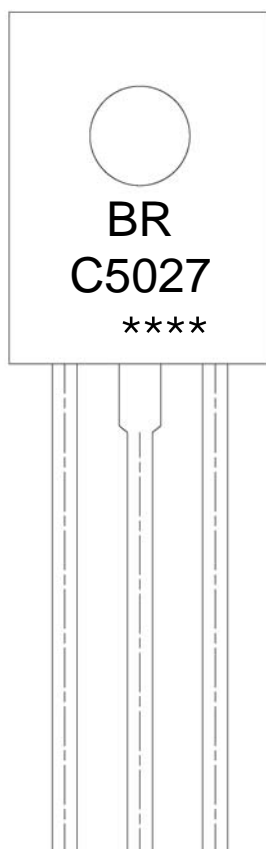
T0-126F

单位: mm



Symbol	Min	Max	Symbol	Min	Max
A	7.8	8.2	a1	0.3	0.35
B	10.8	11.2	E1	4.2	4.5
B1	3.8	4.2	C	3.1	3.4
R	2.95	3.15	C1	1.9	2.0
a	1.27		b1	1.9	
			E1	2.1	2.5

/ Marking Instructions



BR

C5027

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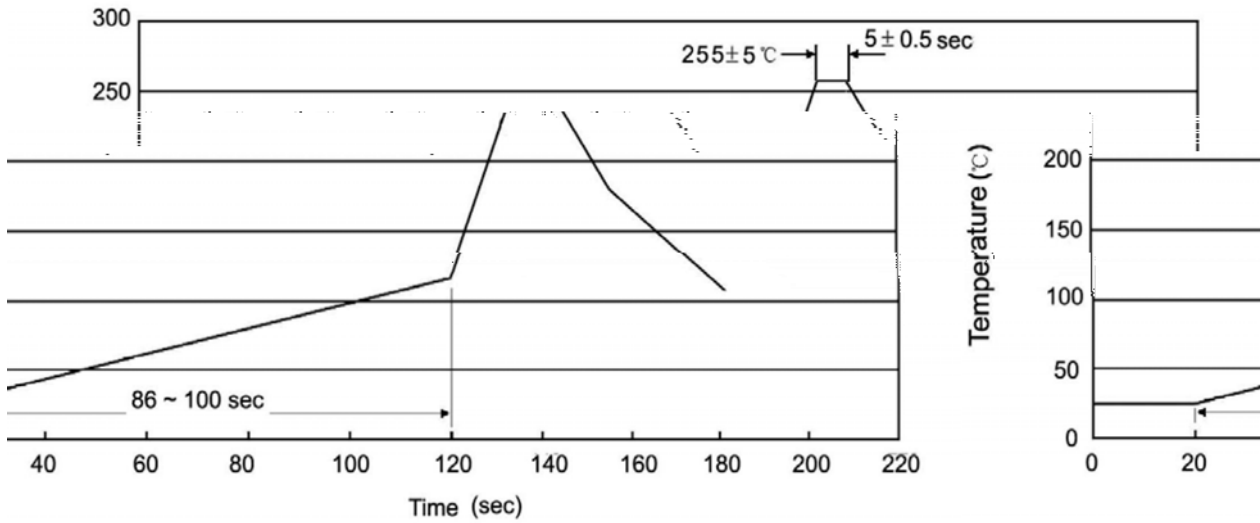
Note:

BR: Company Code

C5027: Product Type.

\*\*\*\*: 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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-126/F	500	6	3,000	5	15,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-126/F	65	26	1,690	5	8,450	532×31×5.6	555×164×50	575×290×180

/ Notices