

/ Descriptions

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

/ Features

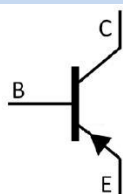
h_{FE}

Excellent h_{FE} linearity, low $V_{CE(sat)}$, high P_C .

/ Applications

Audio frequency amplifier and switching, especially in hybrid integrated circuits applications.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Collector PIN 3 Base

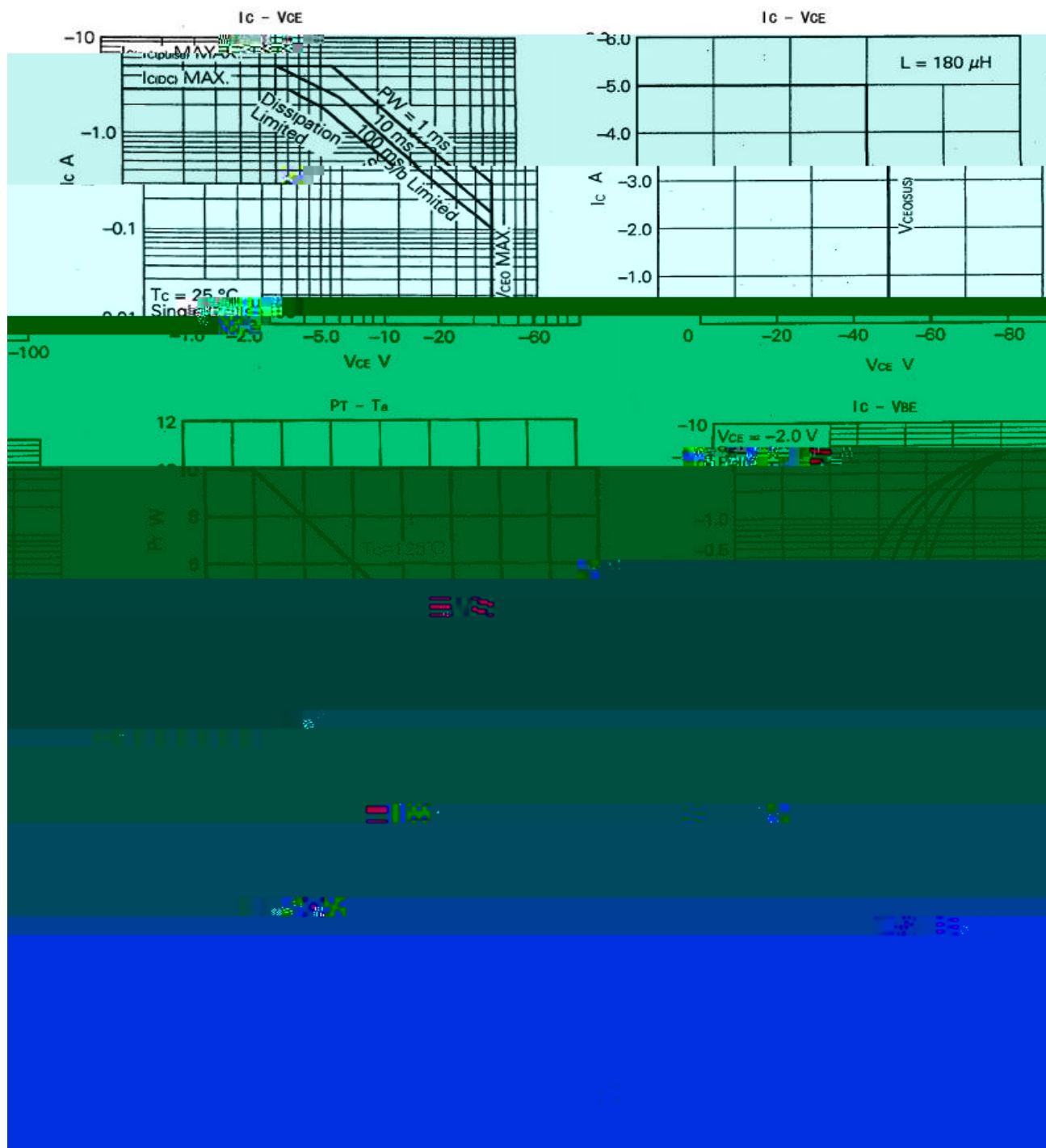
/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	M	L	K
h_{FE} Range	100 200	160 320	200 400

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-60	V
Collector to Emitter Voltage	V_{CEO}	-60	V
Emitter to Base Voltage	V_{EBO}	-7.0	V
Collector Current - Continuous	I_C	-3.0	A
Collector Power Dissipation	P_C	2.0	W
Collector Power Dissipation	$P_C(T_c=125^\circ\text{C})$	10	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 ~ 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-0.1\text{mA}$ $I_E=0$	-60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-1.0\text{mA}$ $I_B=0$	-60			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-0.1\text{mA}$ $I_C=0$	-7.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-60\text{V}$ $I_E=0$			-10	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-7.0\text{V}$ $I_C=0$			-10	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-2.0\text{V}$ $I_C=-600\text{mA}$	100		400	
	$h_{FE(2)}$	$V_{CE}=-2.0\text{V}$ $I_C=-200\text{mA}$	60			
	$h_{FE(3)}$	$V_{CE}=-2.0\text{V}$ $I_C=-2.0\text{A}$	50			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-1.5\text{A}$ $I_B=-150\text{mA}$			-0.3	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-1.5\text{A}$ $I_B=-150\text{mA}$			-1.2	V
Transition Frequency	f_T	$V_{CE}=-5.0\text{V}$ $I_C=-1.5\text{A}$		50		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}$ $I_E=0$ $f=1.0\text{MHz}$		40		pF

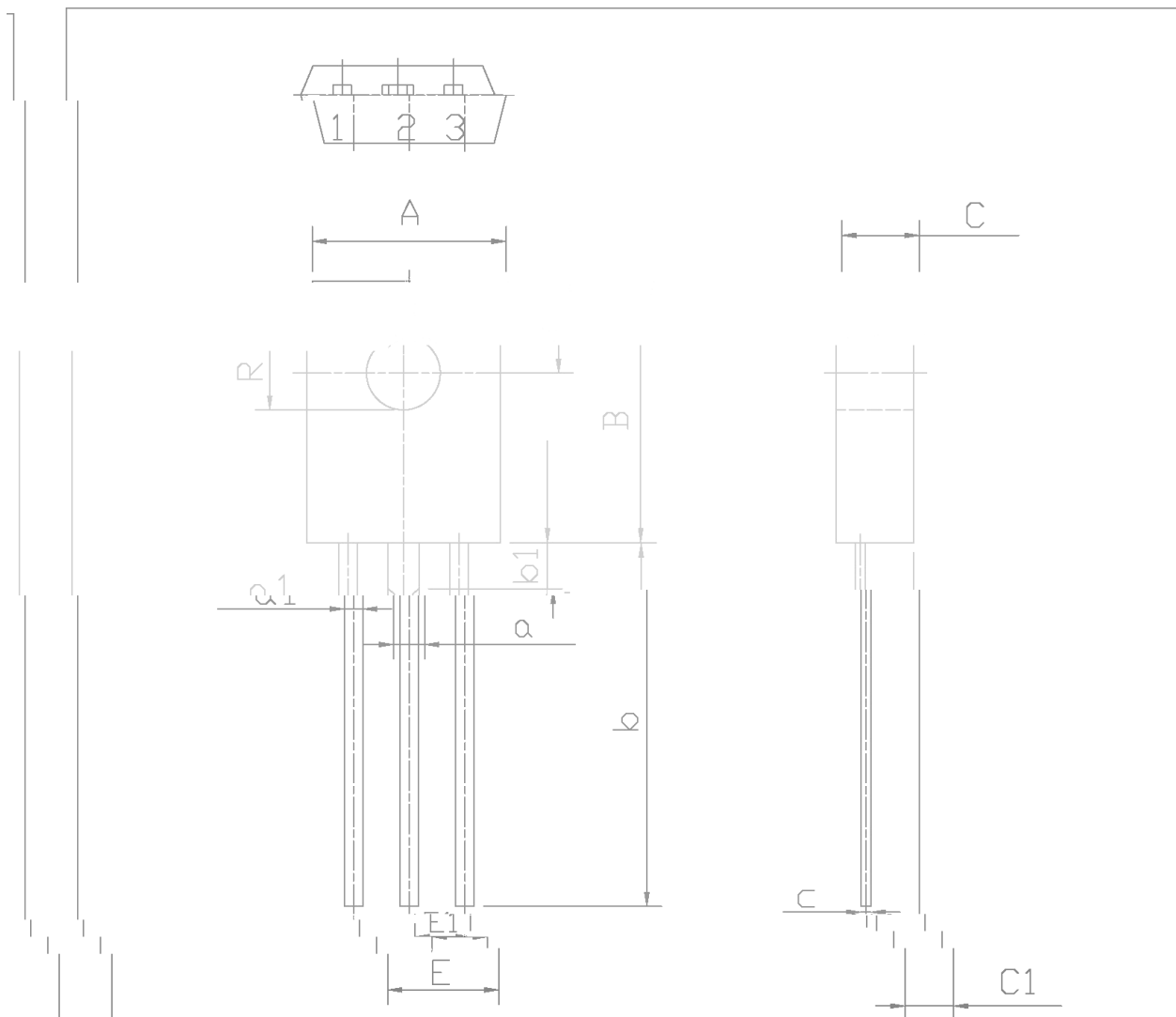
/ Electrical Characteristic Curve



/ Package Dimensions

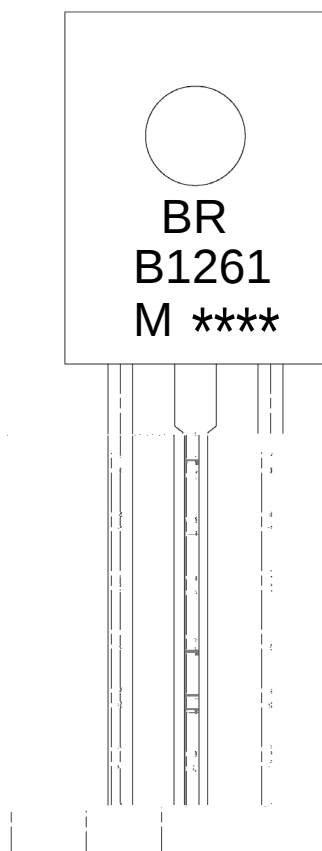
2SB1261L

单位: mm



Dimensions in Millimeters			Dimensions in Millimeters		
Symbol	Min	Max	Symbol	Min	Max
A	7.8	8.2	a1	0.65	0.85
B	10.0	11.2	E	4.4	4.8
B1	3.8	4.2	C	3.1	3.3
R	2.25	3.5	C1	1.9	2.1
b	14	16	c	0.3	0.6
b1	1.9		a	1.27	
E1	2.1	2.5			

/ Marking Instructions



BR

B1261

M: h_{FE}

Note:

BR: Company Code

B1261: Product Type.

M: h_{FE} Classifications Symbol

****: 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 ³)		
	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 ³)		
	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