

/ Descriptions

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

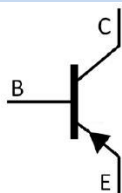
/ Features

2SD600K
High V_{CEO} , high current, low saturation voltage and good linearity of h_{FE} ; complementary pair with 2SD600K.

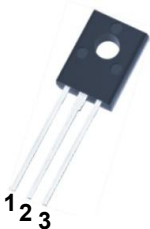
/ Applications

Low frequency power amplifier, medium speed switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Collector PIN 3 Base

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	D	E	F
h_{FE} Range	60~120	100~200	160~320

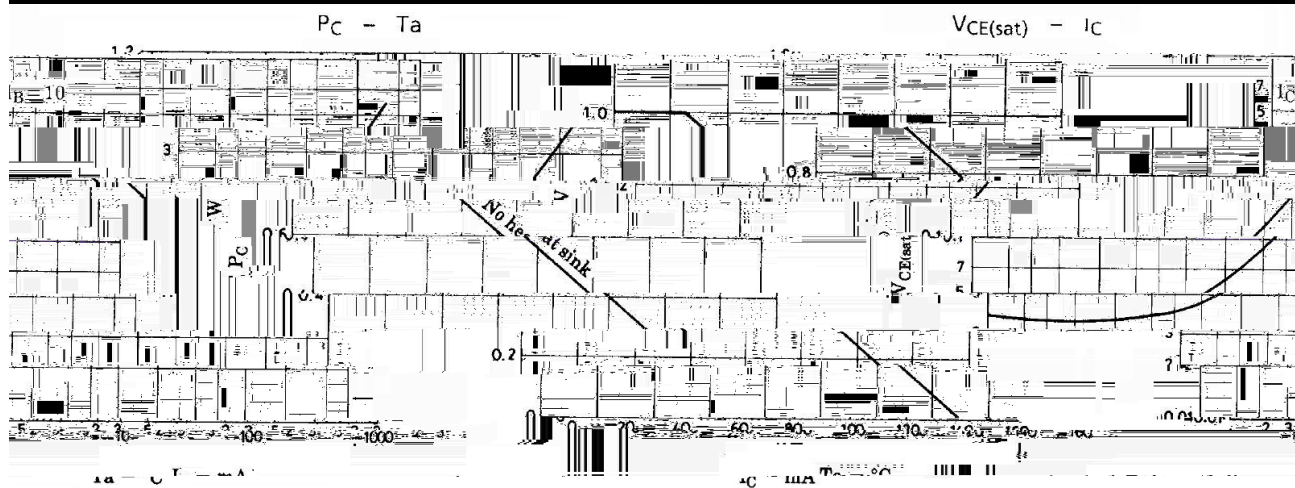
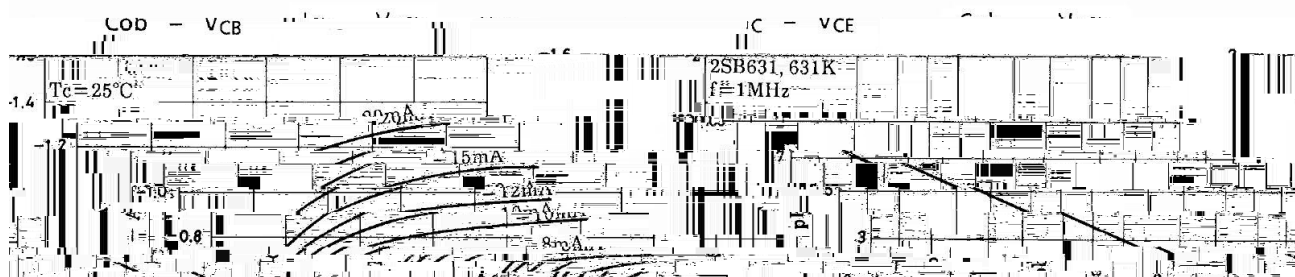
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-120	V
Collector to Emitter Voltage	V_{CEO}	-120	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-1.0	A
Peak Collector Current – Continuous	I_{CP}	-2.0	A
Collector Power Dissipation	P_C	1.0	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 Base Breakdown Voltage	V_{CBO}	$I_C=-10\mu A$ $I_E=0$	-120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-1.0mA$ $R_{BE}=\infty$	-120			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-10\mu A$ $I_C=0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-50V$ $I_E=0$			-1.0	μA
Emitter Cut-Off Current	I_{EBO}	$V_{CE}=-4.0V$ $I_C=0$			-1.0	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=-5.0V$ $I_C=-50mA$	60		320	
	$h_{FE(2)}$	$V_{CE}=-5.0V$ $I_C=-500mA$	20			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500mA$ $I_B=-50mA$		-0.15	-0.4	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-500mA$ $I_B=-50mA$		-0.85	-1.2	V
Transition Frequency	f_T	$V_{CE}=-10V$ $I_C=-50mA$		110		MHz
Reverse Transfer Capacitance	C_{ob}	$V_{CB}=-10V$ $f=1.0MHz$		30		pF

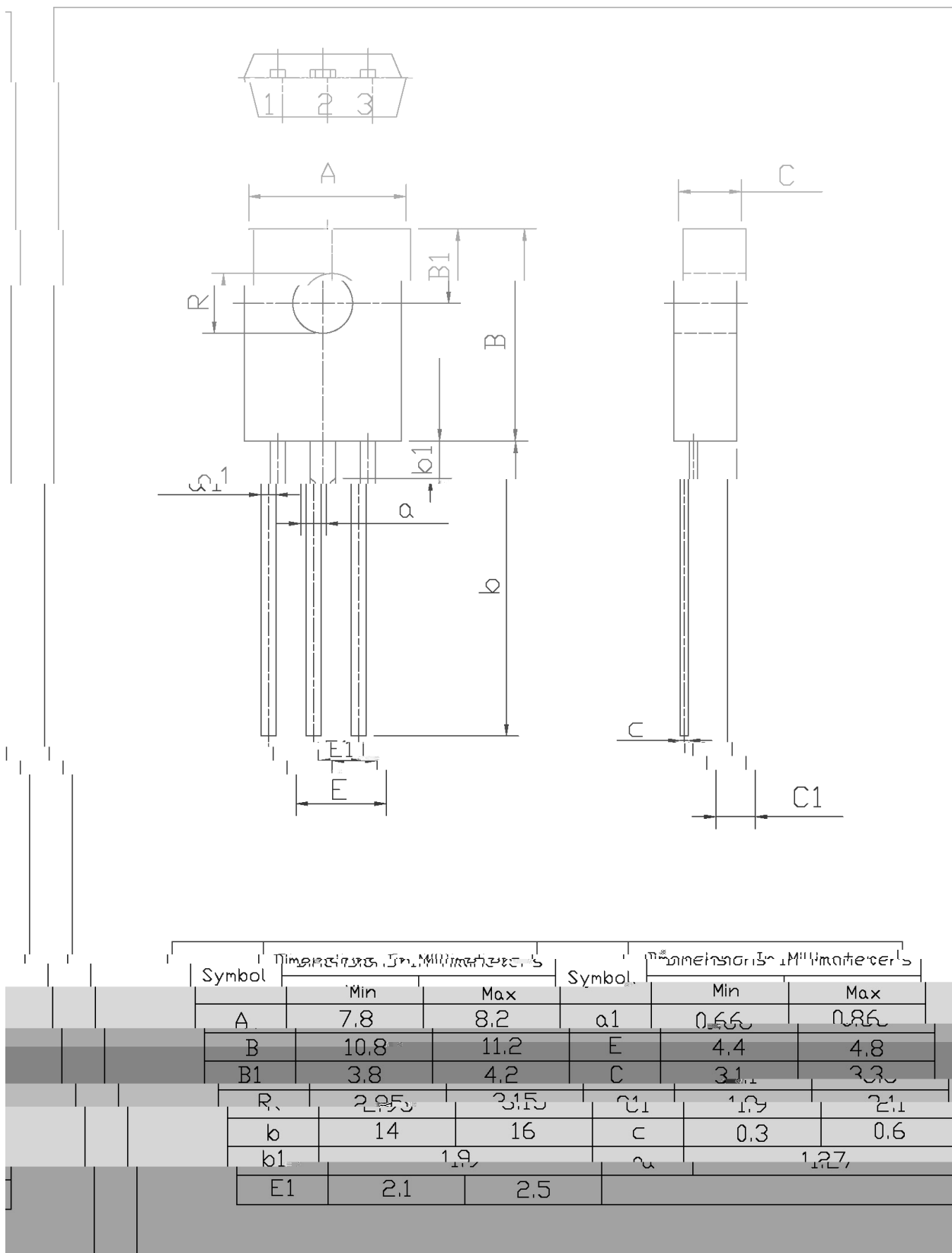
/ **Electrical Characteristic Curve**



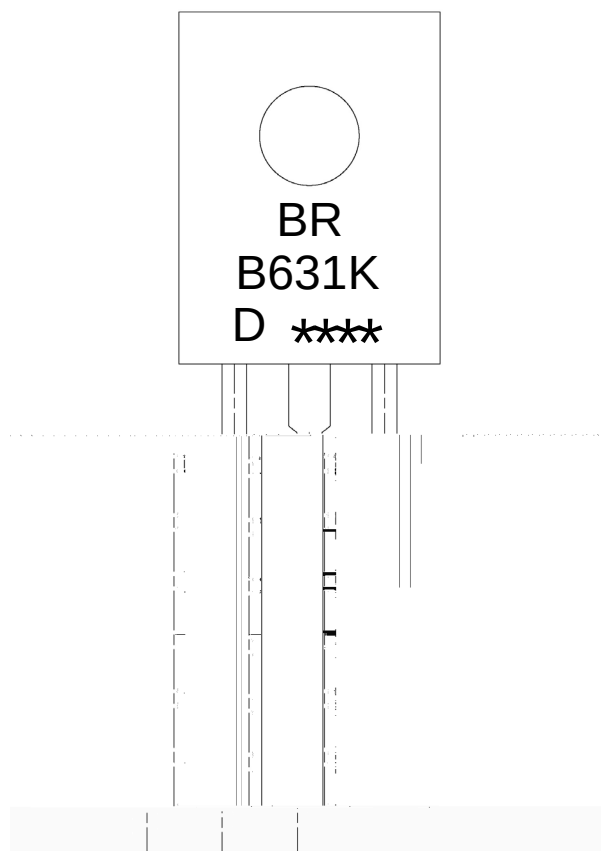
/ Package Dimensions

1U-125T

单位: mm



/ Marking Instructions



BR

B631K

D: h_{FE}

Note:

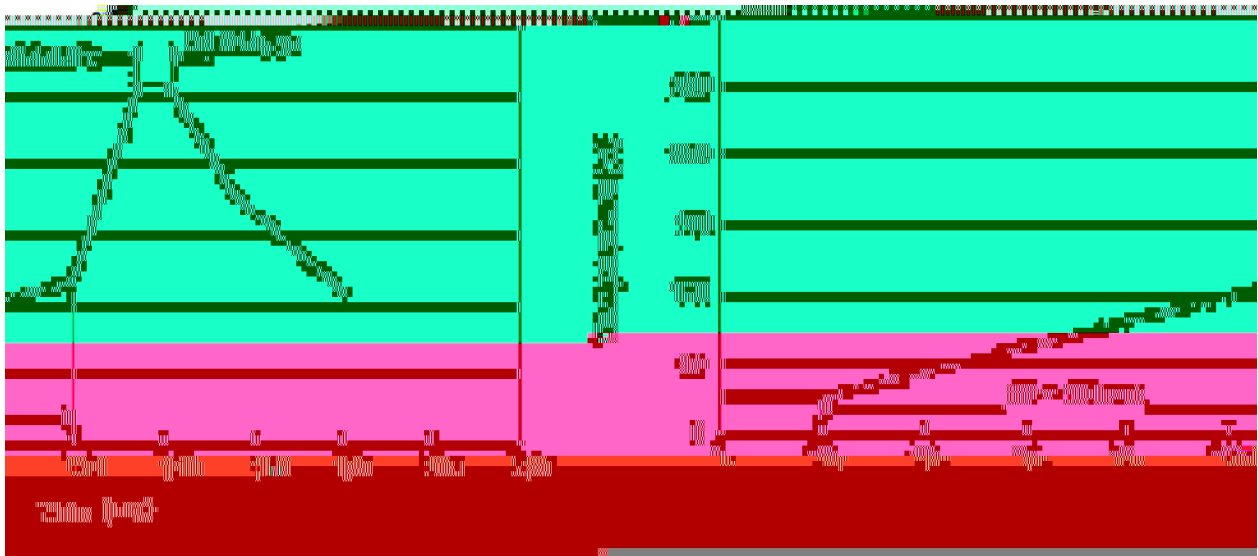
BR: Company Code

B631K: Product Type.

D: 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	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-126/F	500	6	3,000	5	15,000	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