/ Descriptions

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

/ Features

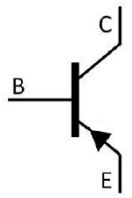
, 2SD600K

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

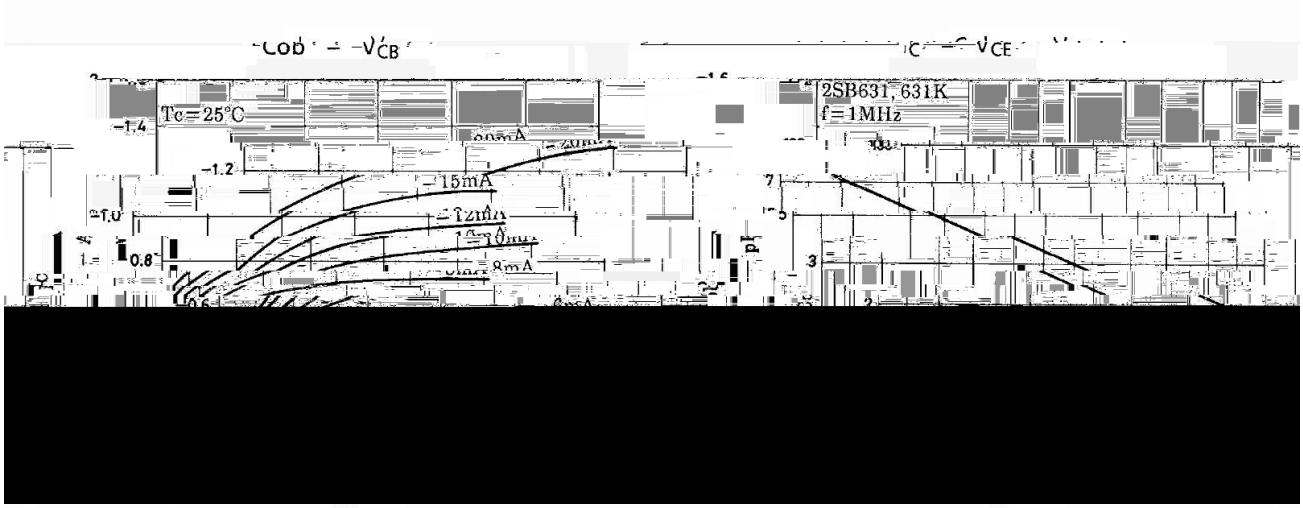
/ Absolute Maximum Ratings(Ta=25)

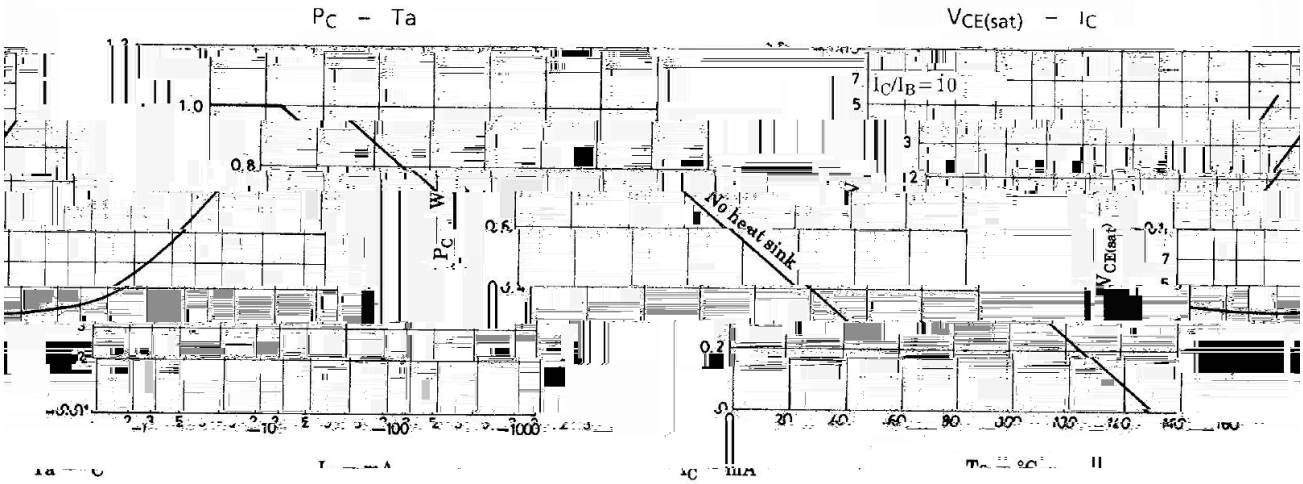
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-120	V
Collector to Emitter Voltage	V_{CEO}	-120	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-1.0	A
Peak Collector Current – Continuous	I_{CP}	-2.0	A
Collector Power Dissipation	P_C	1.0	W
Junction Temperature	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=-10μA I_E=0	-120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-1.0mA R_{BE}=∞	-120			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-10μA 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

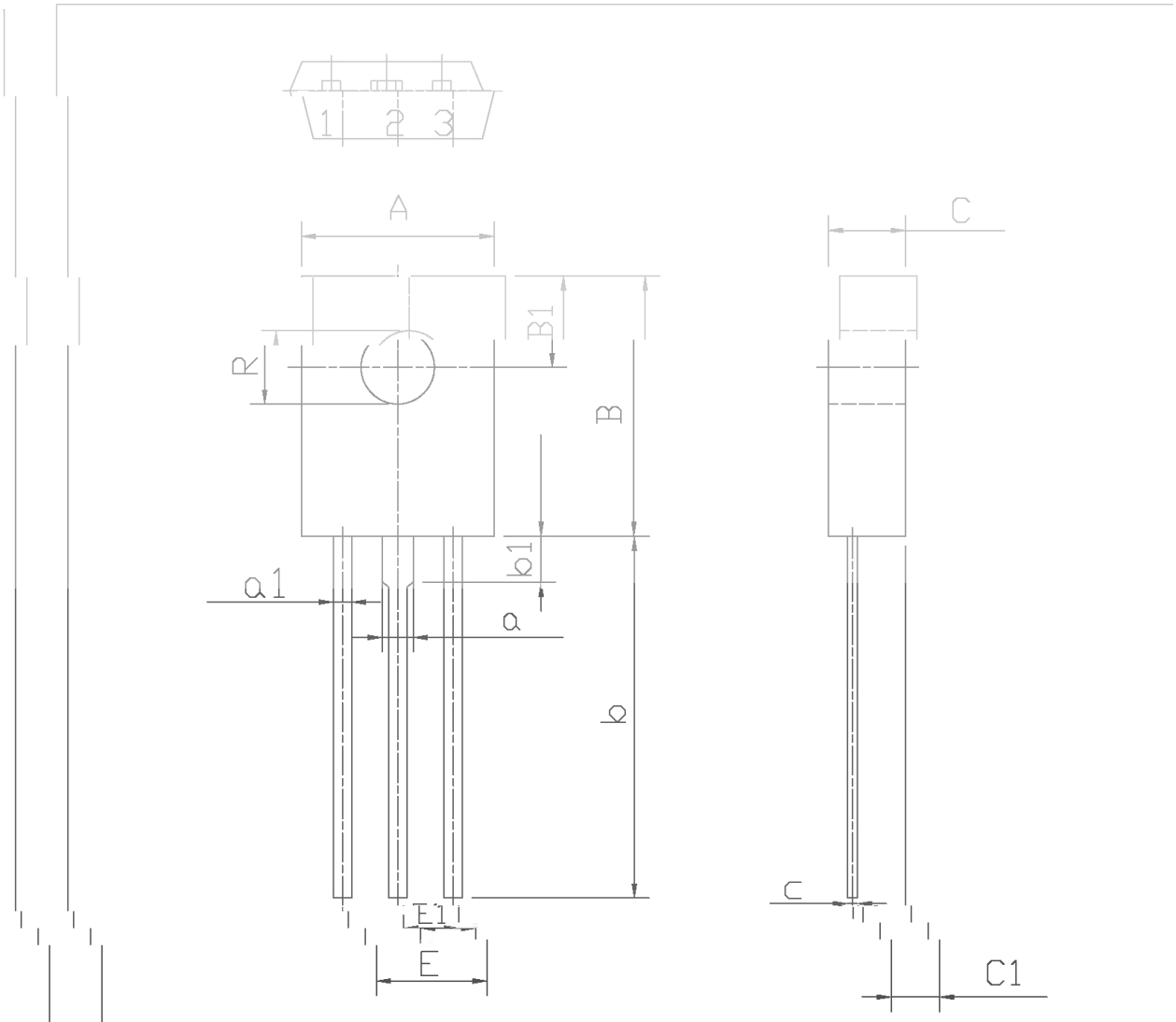
/ Electrical Characteristic Curve





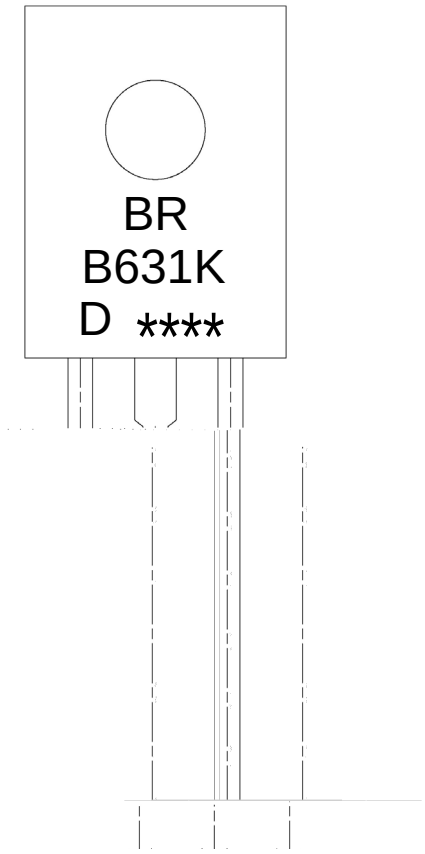
/ Package Dimensions

单位：mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	7.8	8.2	a1	0.66	0.86
B	10.8	11.2	E	4.41	4.8
B1	3.8	4.2	C	3.1	3.3
R	2.95	3.15	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

B631K

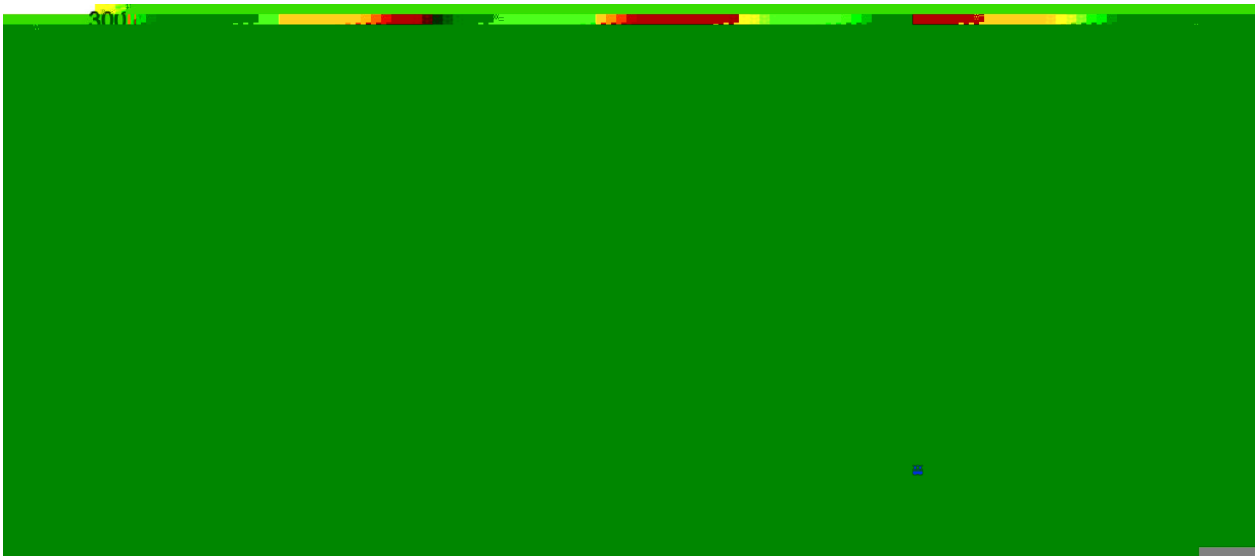
D: h_{FE}

****

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