

/ Descriptions

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

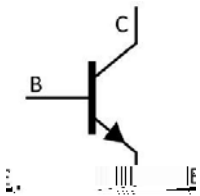
/ Features

V_{CE0} , 2SB631K
High V_{CE0} ,high current, low $V_{CE(sat)}$ and good linearity of h_{FE} ; complementary pair with 2SB631K.

/ 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

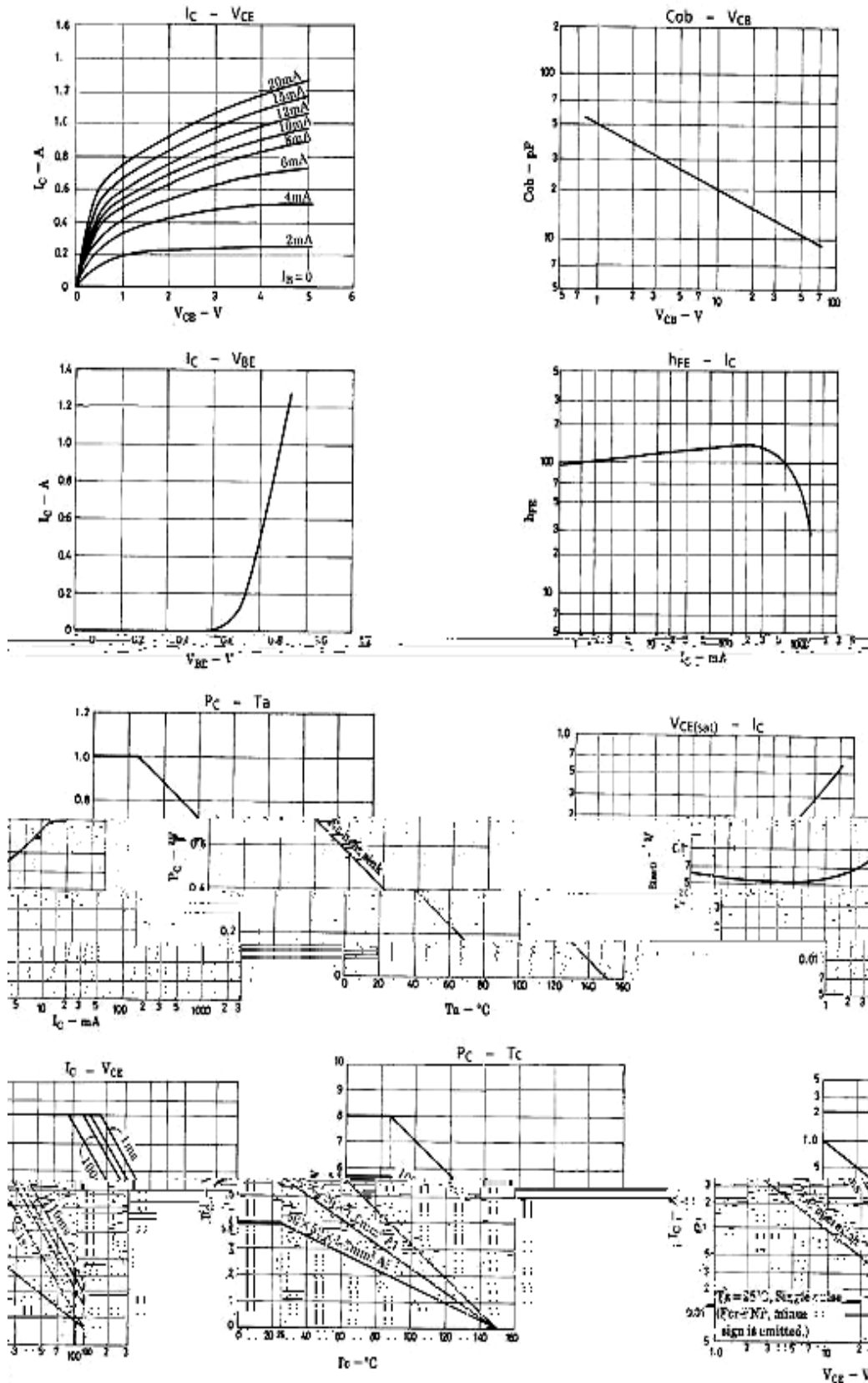
/ Absolute Maximum Ratings(Ta=25)

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	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}	$I_C=10\text{ A}$ $I_E=0$	120			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0\text{mA}$ $R_{BE}=\infty$	120			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\text{ A}$ $I_C=0$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=50\text{V}$ $I_E=0$			1.0	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=4.0\text{V}$ $I_C=0$			1.0	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0\text{V}$ $I_C=50\text{mA}$	60		320	
	$h_{FE(2)}$	$V_{CE}=5.0\text{V}$ $I_C=500\text{mA}$	20			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}$ $I_B=50\text{mA}$		0.15	0.4	V
Base to Emitter Voltage	$V_{BE(sat)}$	$I_C=500\text{mA}$ $I_B=50\text{mA}$		0.85	1.2	V
Transition Frequency	f_T	$V_{CE}=10\text{V}$ $I_C=50\text{mA}$		130		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}$ $f=1.0\text{MHz}$		20		pF

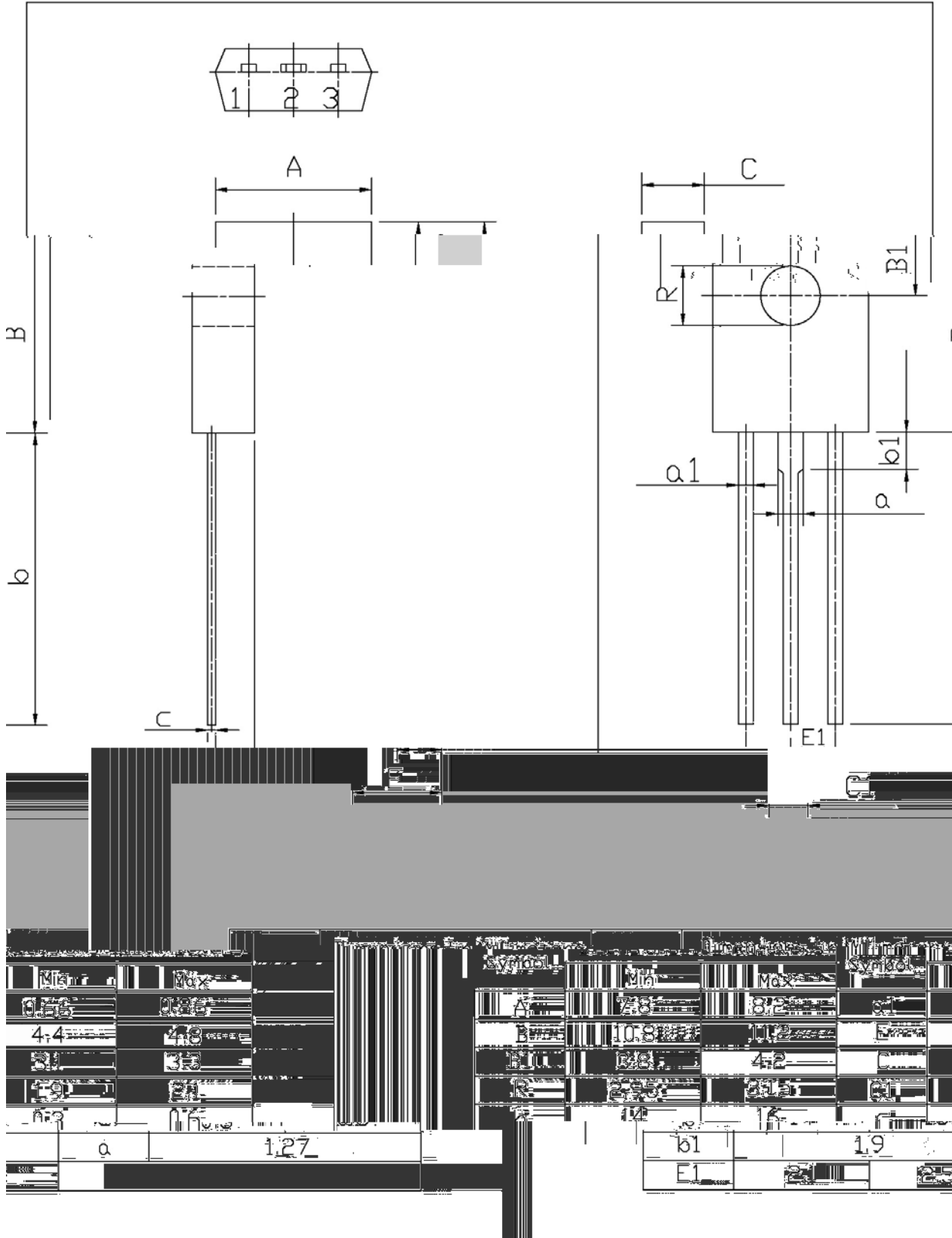
/ Electrical Characteristic Curve



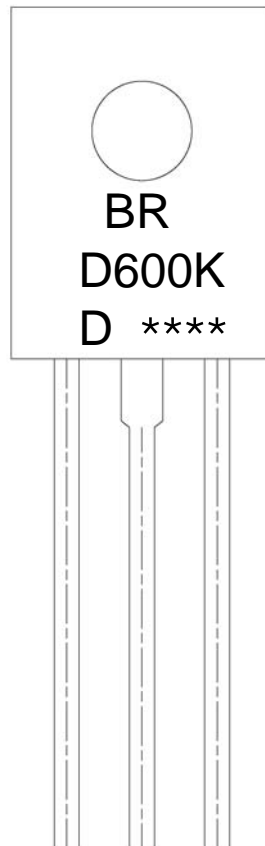
/ Package Dimensions

T0-126F

单位: mm



/ Marking Instructions



BR

D600K

D: h_{FE}

Note:

BR: Company Code

D600K: Product Type.

D: h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No.

