

/ Descriptions

Silicon PNP transistor in a TO-220F Plastic Package.

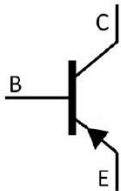
/ Features

Low saturation voltage, excellent DC current gain characteristics.

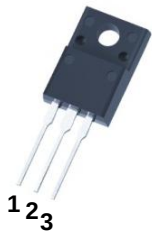
/ Applications

Audio frequency power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	E	F
h_{FE} Range	100 200	160 320

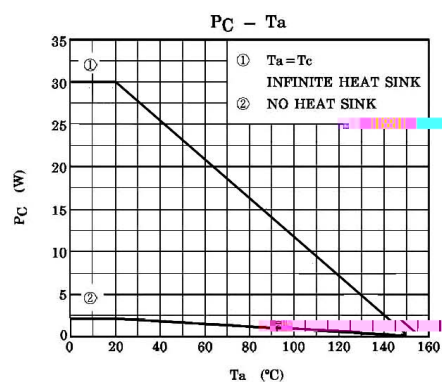
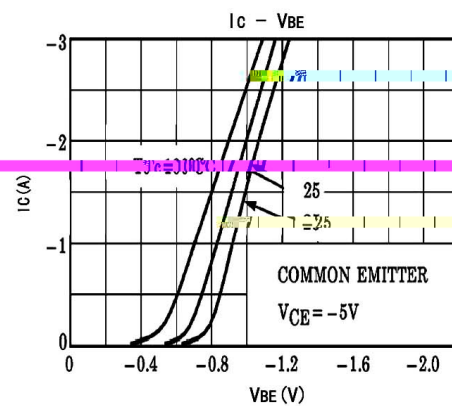
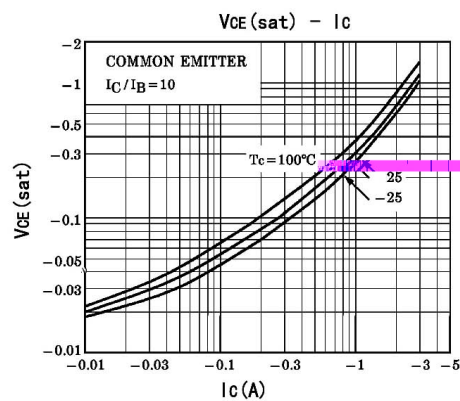
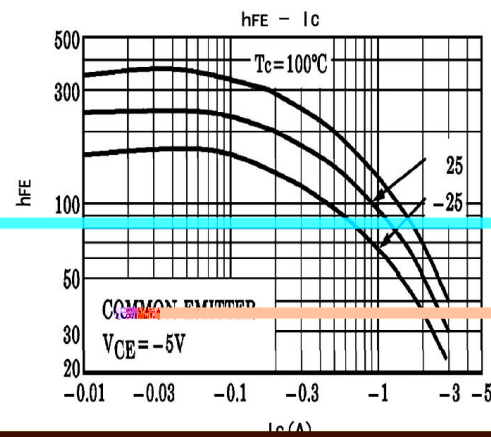
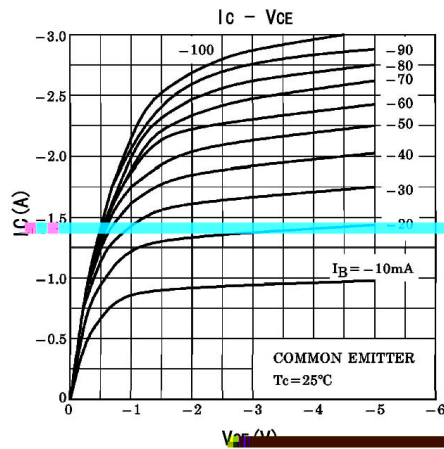
/ Absolute Maximum Ratings(Ta=25)

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}	-5.0	V
Collector Current - Continuous	I_C	-3.0	A
Collector Current – Continuous(Pulse)	I_{CP}	-6.0	A
Collector Power Dissipation	P_C	2.0	W
Collector Power Dissipation	$P_C (T_c=25^{\circ}C)$	30	W
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 150	$^{\circ}C$

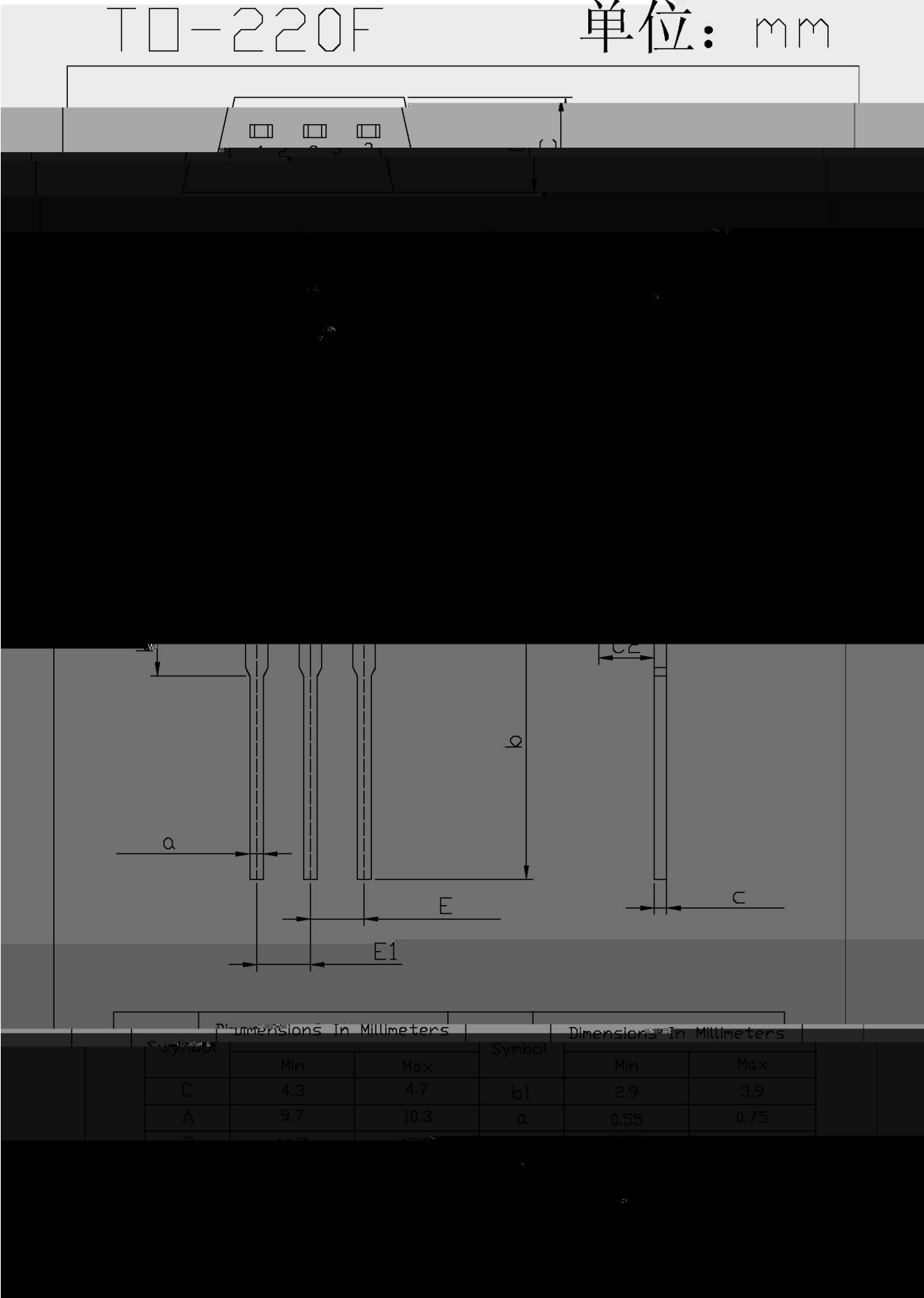
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=-50\mu A$	-60			V
Collector to Base Breakdown Voltage	V_{CEO}	$I_C=-1.0mA$	-60			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=-50\mu A$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-60V \quad I_E=0$			-10	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-4.0V \quad I_C=0$			-10	μA
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-2.0A \quad I_B=-200mA$			-1.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-2.0A \quad I_B=-200mA$			-1.5	V
DC Current Gain	h_{FE}	$V_{CE}=-5.0V \quad I_C=-500mA$	100		320	
Transition Frequency	f_T	$V_{CE}=-5.0V \quad I_E=50mA$ $f=5.0MHz$		15		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10V \quad I_E=0$ $f=1.0MHz$		80		pF

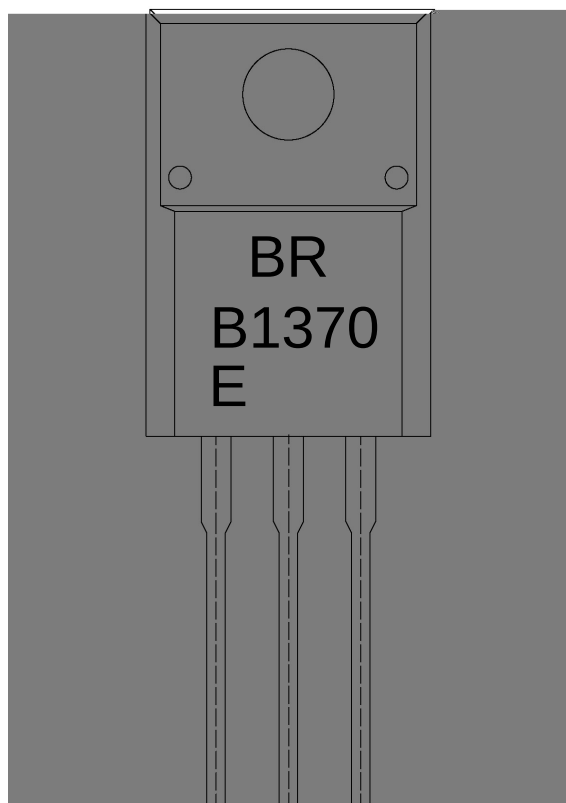
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



Note:

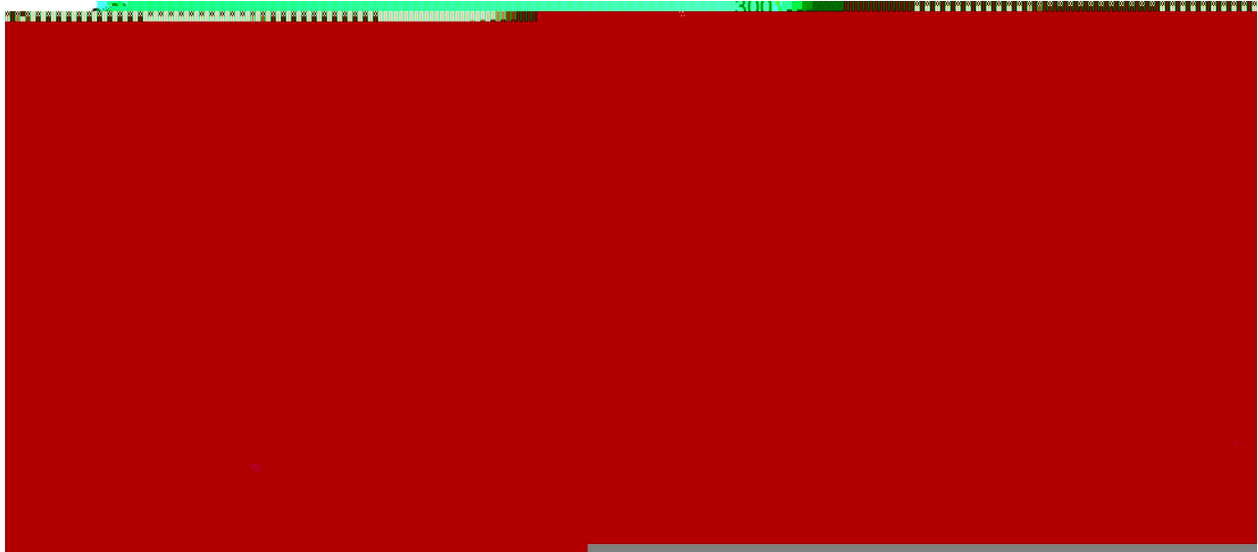
BR: Company Code.

B1370: Product Type.

E: 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)		

/ TUBE

Package Type	Units					Dimension (unit mm ³)		

/ Notices