

/ Descriptions

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

/ Features

, KTA1658
Good linearity of h_{FE} , complementary to KTA1658.

/ Applications

General purpose amplifier.

/ Equivalent Circuit

/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	O	Y
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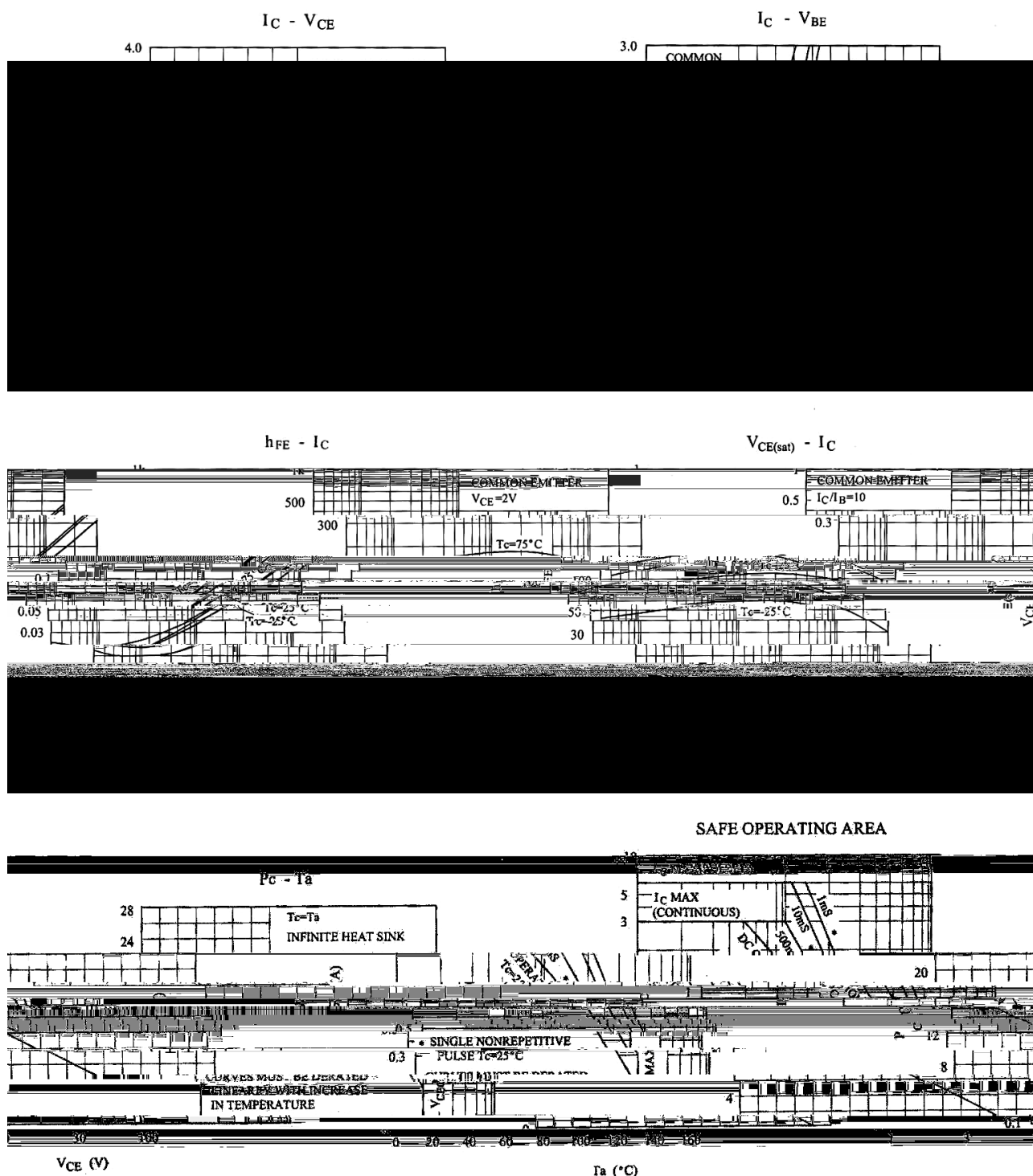
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	30	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	3.0	A
Base Current	I_B	0.3	A
Collector Power Dissipation	P_C	1.5	W
Collector Power Dissipation	$P_C(T_c=25^{\circ}C)$	15	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 Emitter Breakdown Voltage	V_{CEO}	$I_C=10mA$ $I_B=0$	30			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=20V$ $I_E=0$			1.0	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			1.0	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=2.0V$ $I_C=0.5A$	70		240	
	$h_{FE(2)}$	$V_{CE}=2.0V$ $I_C=2.5A$	25			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2.0A$ $I_B=0.2A$		0.3	0.8	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=2.0V$ $I_C=0.5A$		0.75	1.0	V
Transition Frequency	f_T	$V_{CE}=2.0V$ $I_C=0.5A$		100		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$		3.5		pF

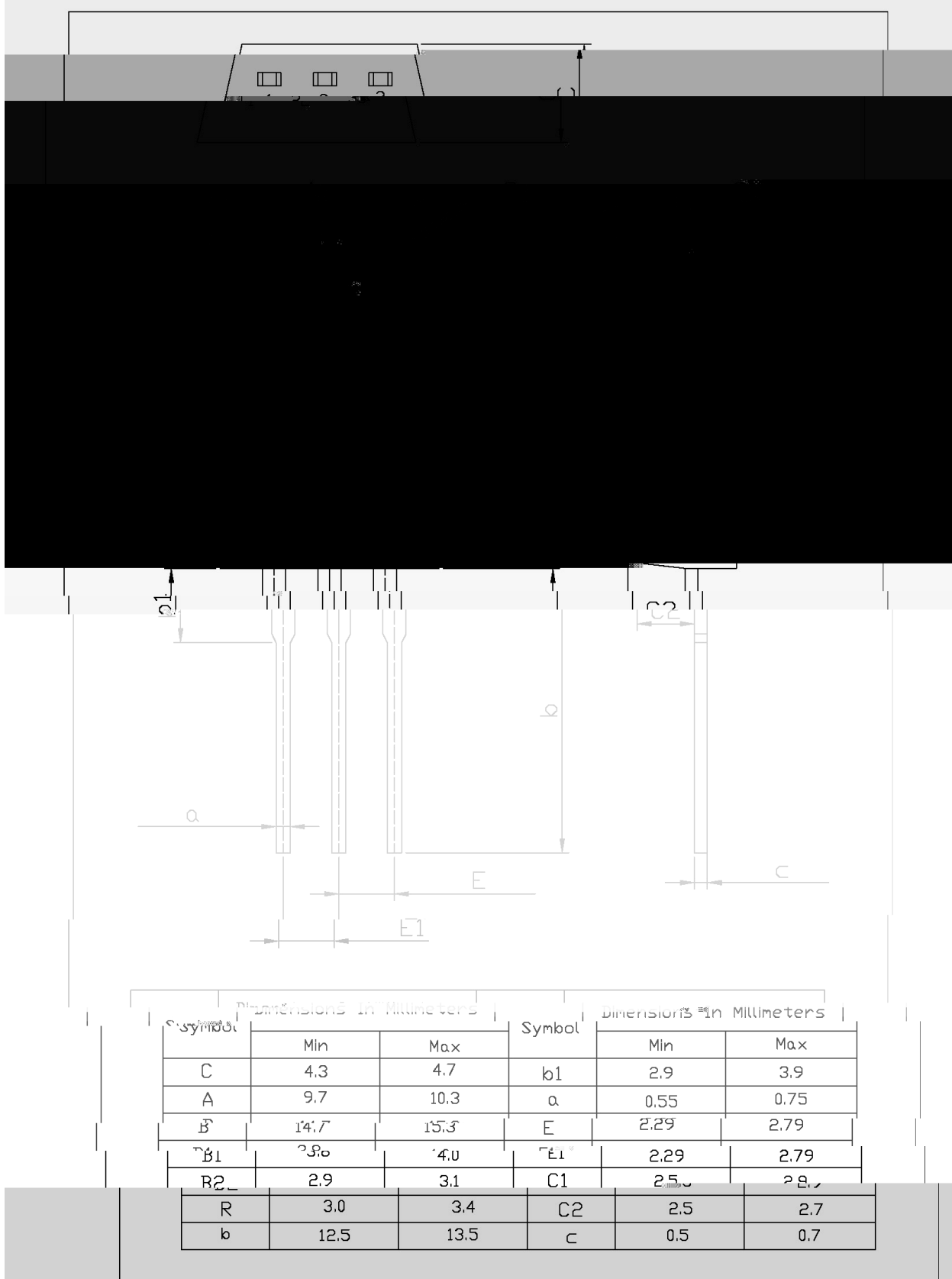
/ Electrical Characteristic Curve



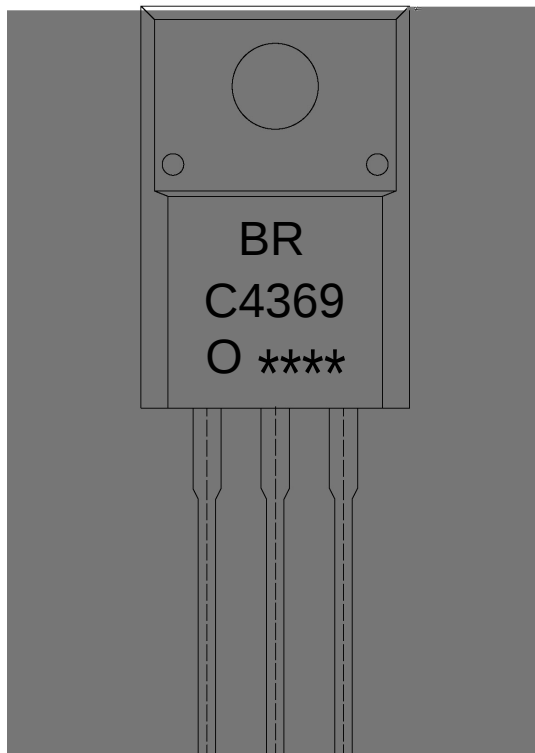
/ Package Dimensions

T0-220F

单位: mm



/ Marking Instructions



BR

C4369

O: h_{FE}

Note:

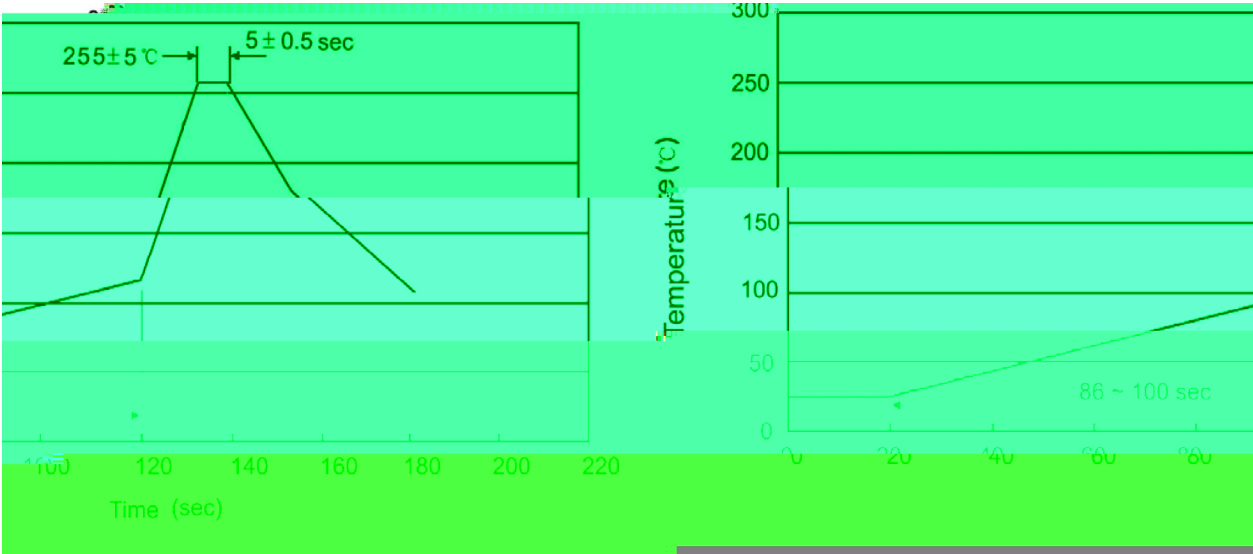
BR: Company Code.

C4369: Product Type.

O: 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