KTC4369

Rev.F Mar.-2016

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

/ Descriptions

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

/ Features

, KTA1658

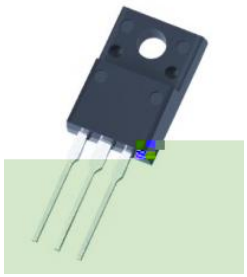
Good linearity of h_{FE}, complementary to KTA1658.

/ 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

/ Absolute Maximum Ratings(Ta=25)

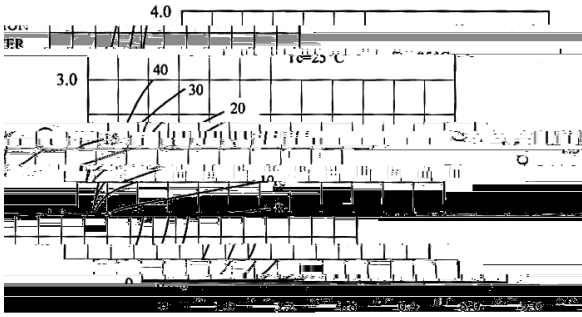
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	30	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	3.0	A
Base Current	I_B	0.3	A
Collector Power Dissipation	P_C	1.5	W
Collector Power Dissipation	P_C(Tc=25)	15	W
Junction 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 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	A
Emitter Cut-Off Current	I_{EBO}	V_{EB}=5.0V I_C=0			1.0	A
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

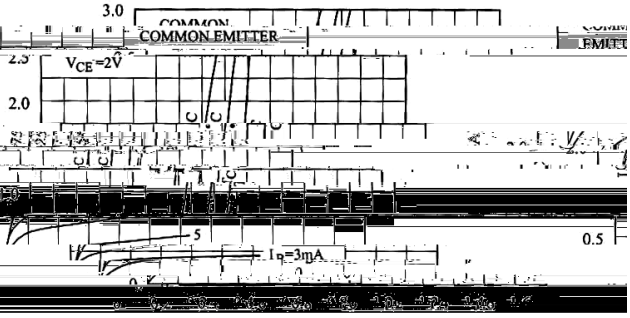
/ Electrical Characteristic Curve

I_C - V_{CE}



V_{CE} (V)

I_C - V_{BE}

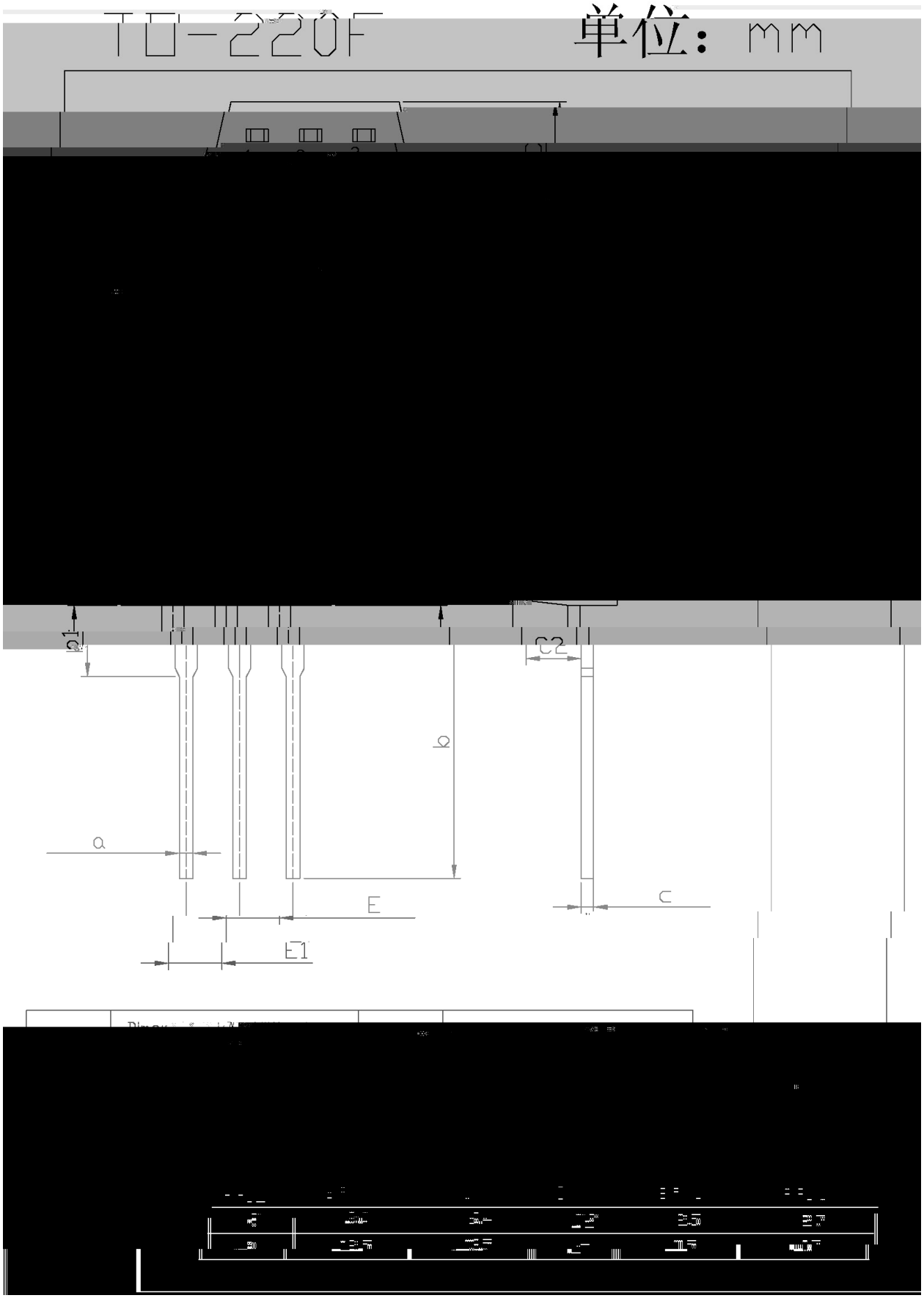


V_{BE} (V)

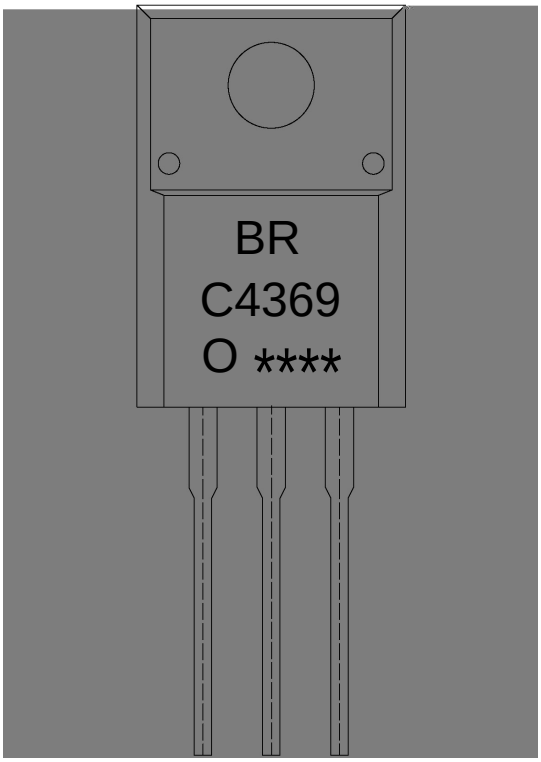
h_{FE} - I_C

$V_{CE(sat)}$ - I_C

/ Package Dimensions



/ Marking Instructions



BR

C4369

O: h_{FE}

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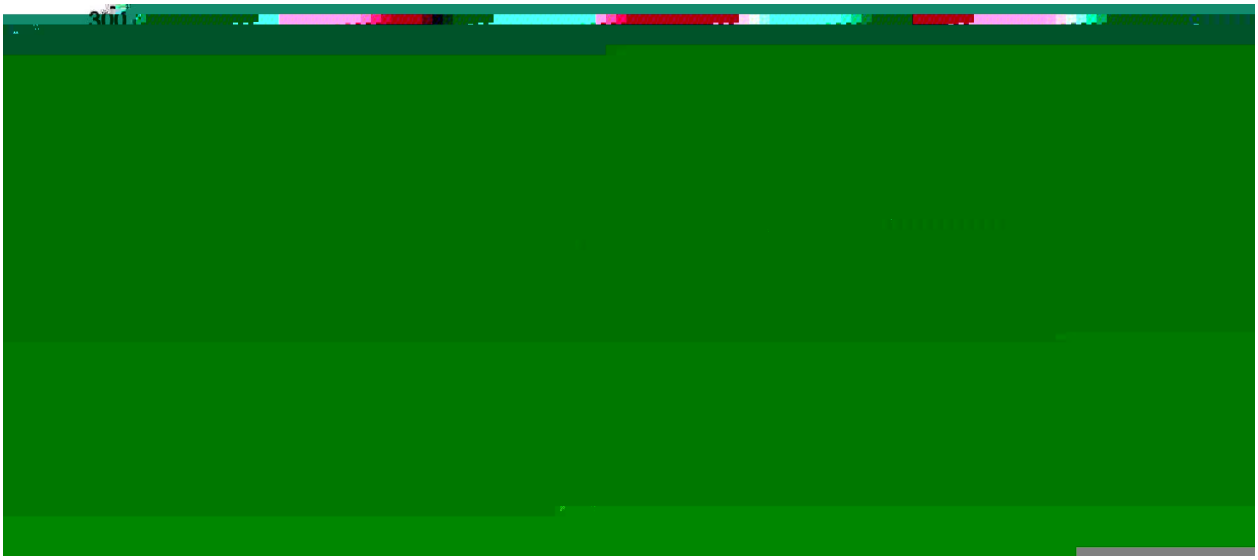
Note:

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 , 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.