

/ Descriptions

KO\$22' = NPN Silicon NPN transistor in a TO-220F Plastic Package.

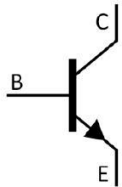
/ Features

High breakdown voltage, excellent current characteristics.

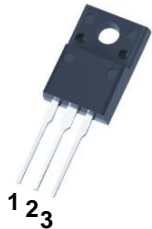
/ Applications

TV vertical output, audio output driver and general purpose amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

See Marking Instructions.

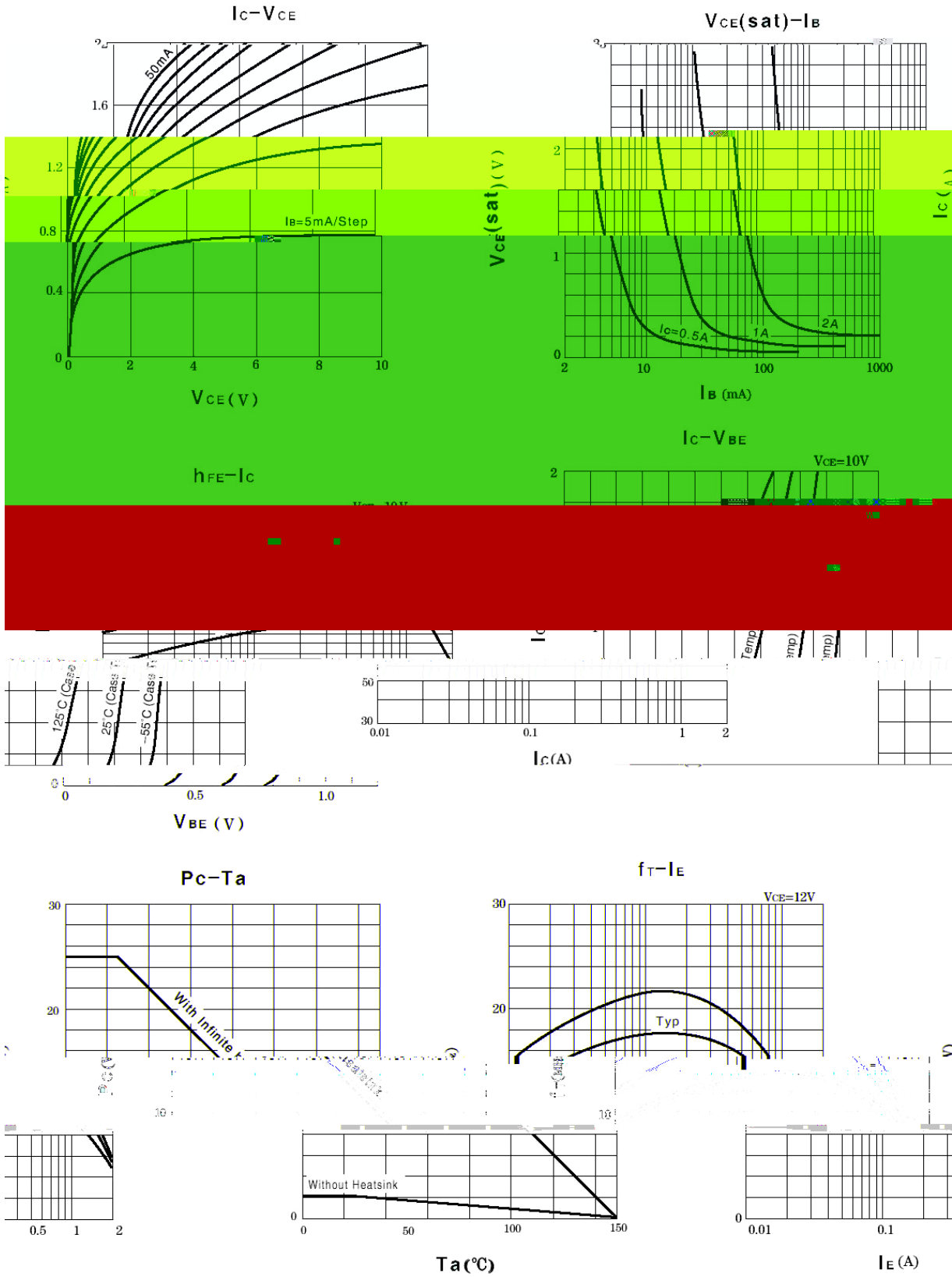
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	200	V
Collector to Emitter Voltage	V_{CEO}	200	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	2.0	A
Base Current - Continuous	I_B	1.0	A
Collector Power Dissipation	$P_C(T_C=25)$	25	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

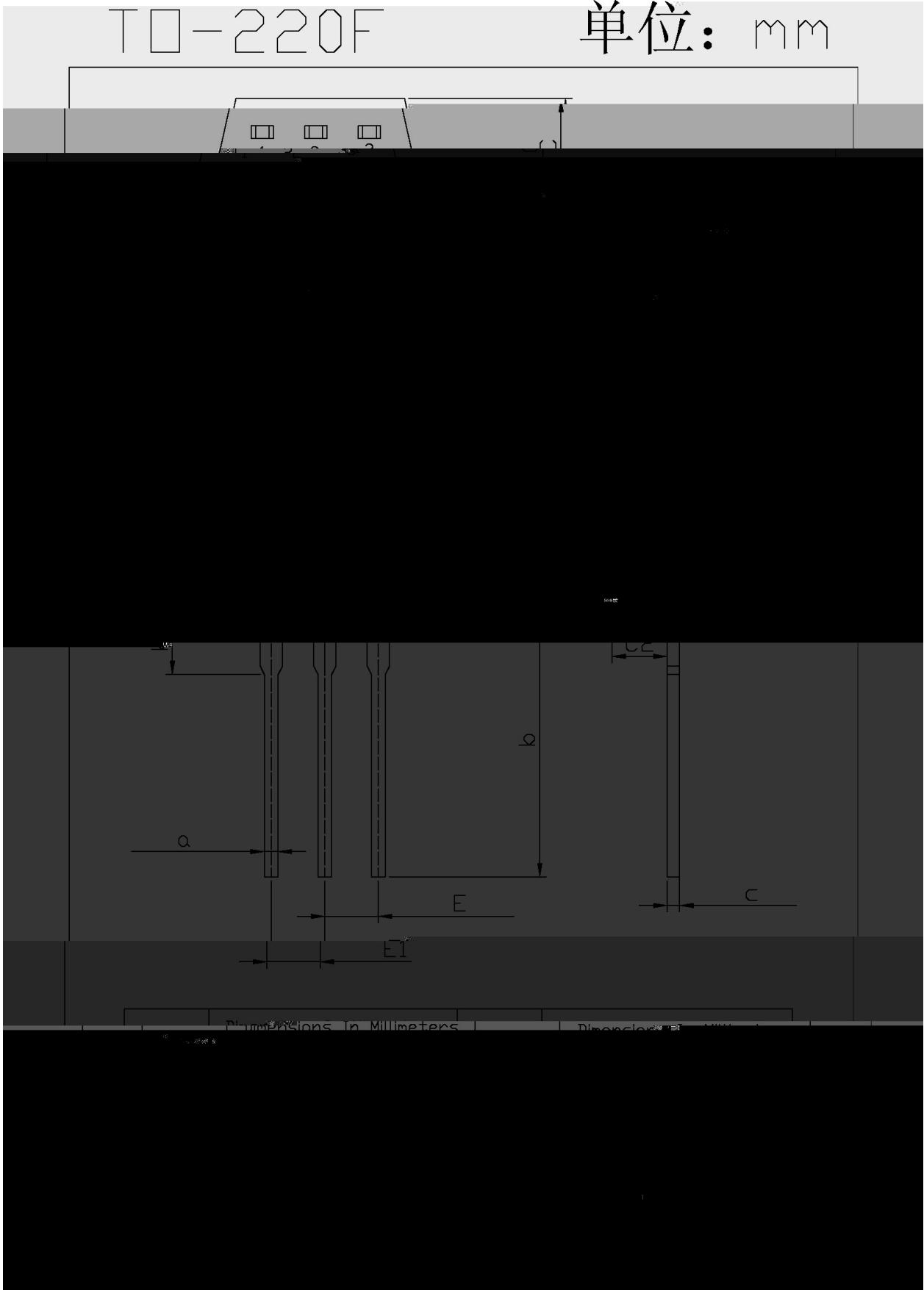
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=25mA$ $I_E=0$	200			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=200V$ $I_E=0$			10	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=6.0V$ $I_C=0$			10	A
DC Current Gain	h_{FE}	$V_{CE}=10V$ $I_C=700mA$	60		200	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=700mA$ $I_B=70mA$			1.0	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500mA$ $I_B=50mA$		0.9	1.2	V
Transition Frequency	f_T	$V_{CE}=12V$ $I_C=200mA$		15		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V$ $f=1.0MHz$		35		pF

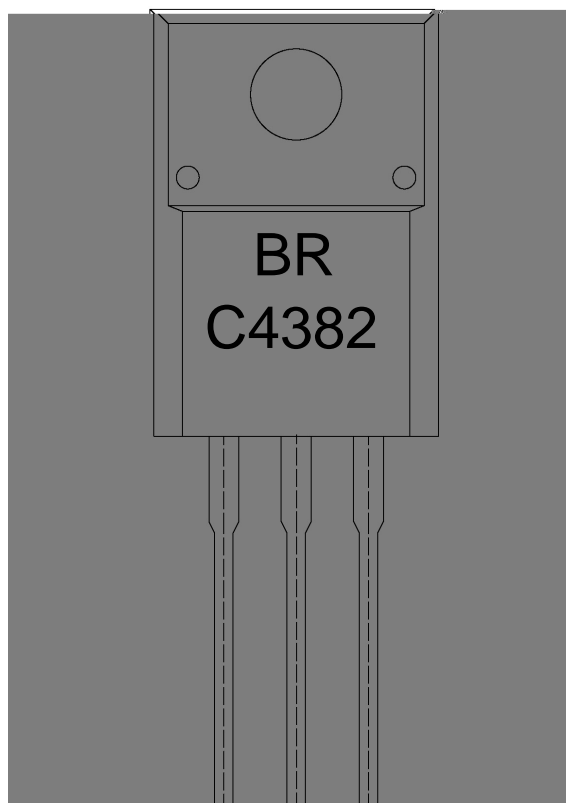
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

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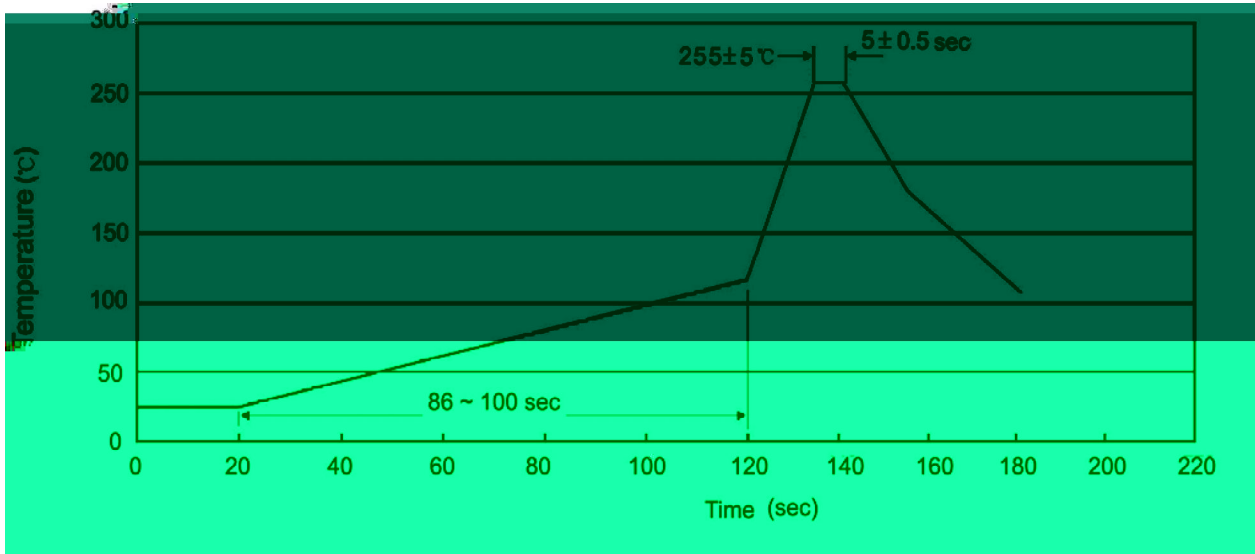
Note:

BR: Company Code.

C4382: Product Type.

****: 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 封装形式	Units 包装数量	Dimension 包装尺寸 (unit: mm ³)
只袋	只盒	
袋盒	只盒	