

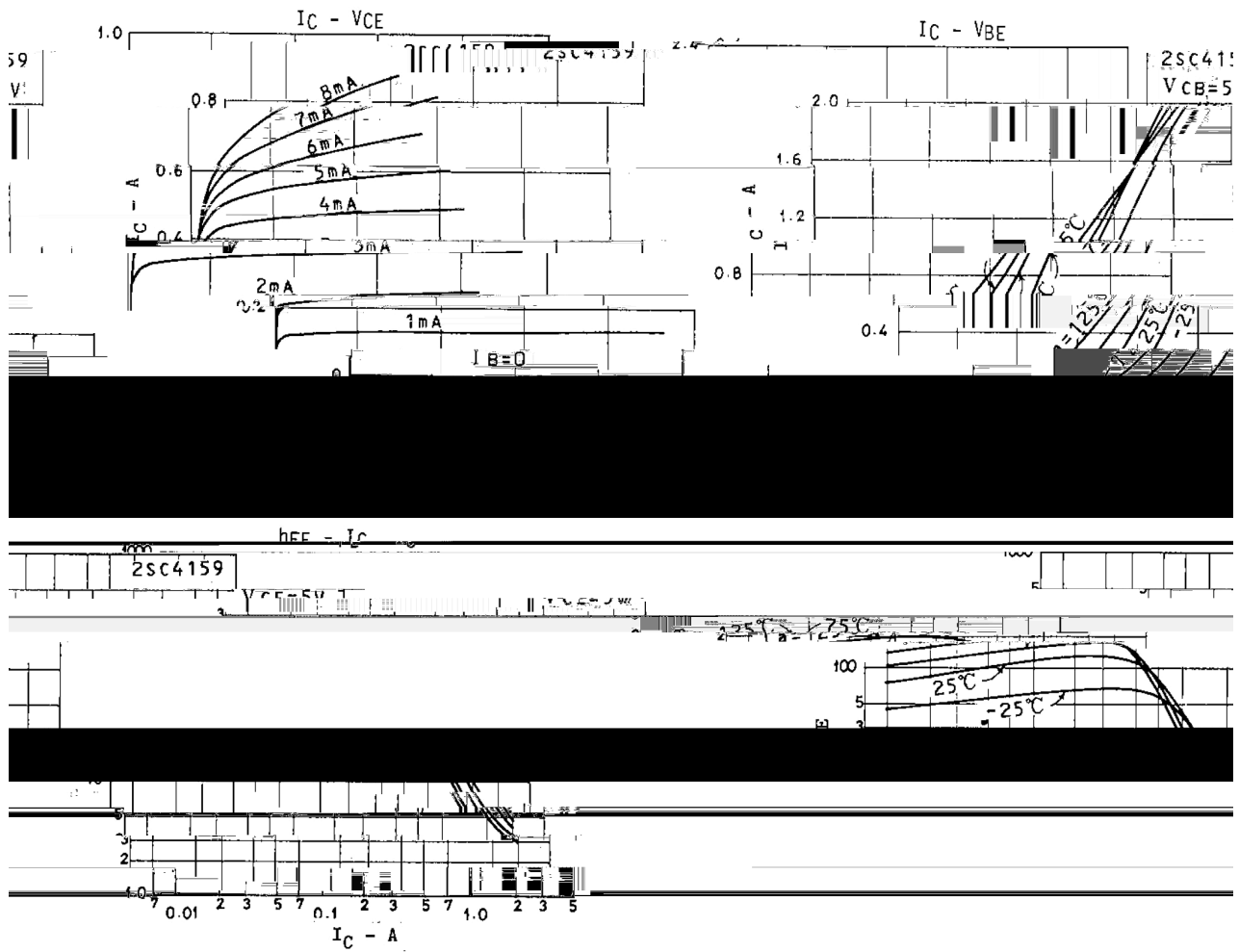
Rev.F Mar.-2016

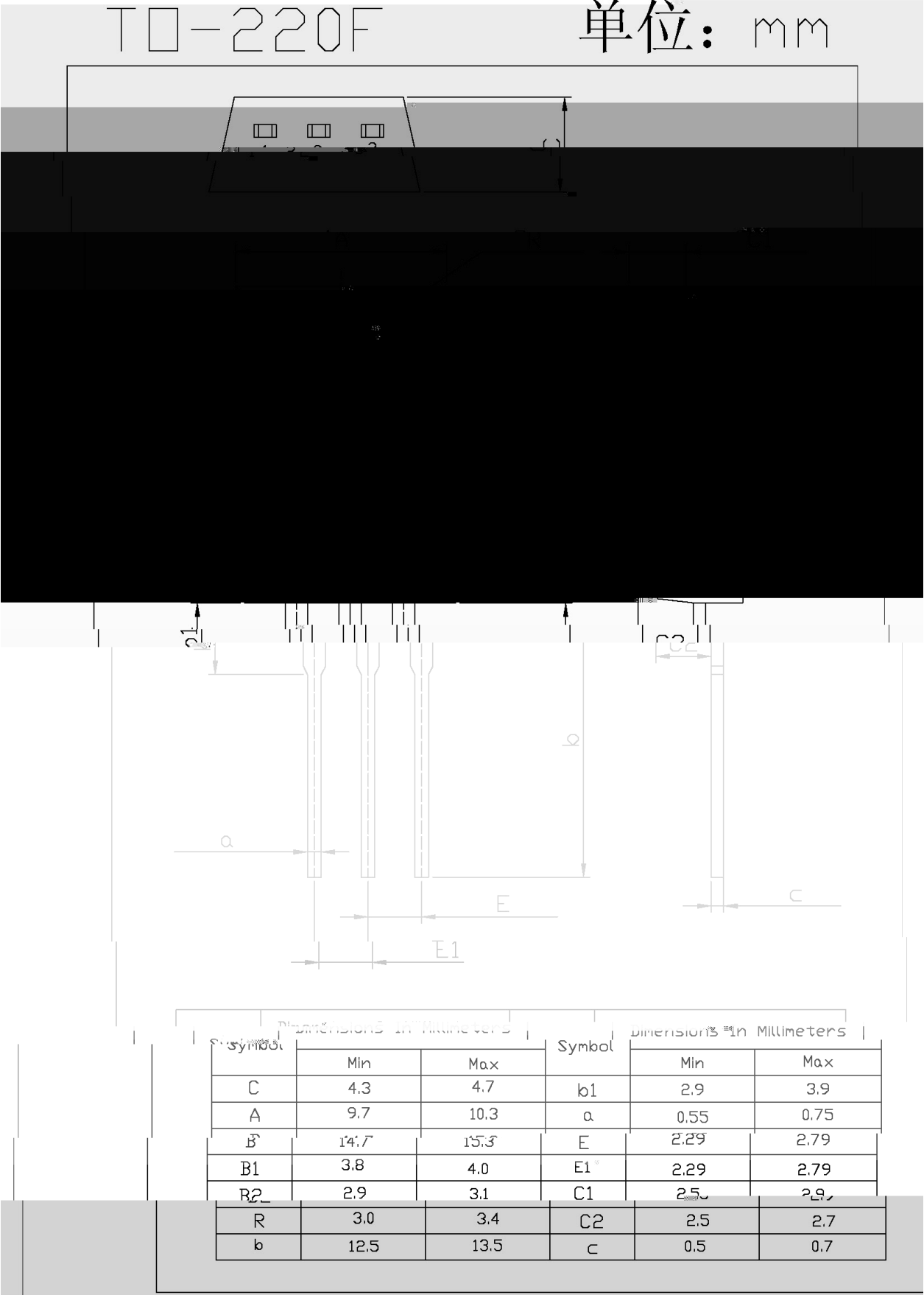
Silicon NPN transistor in a TO-220F Plastic Package.

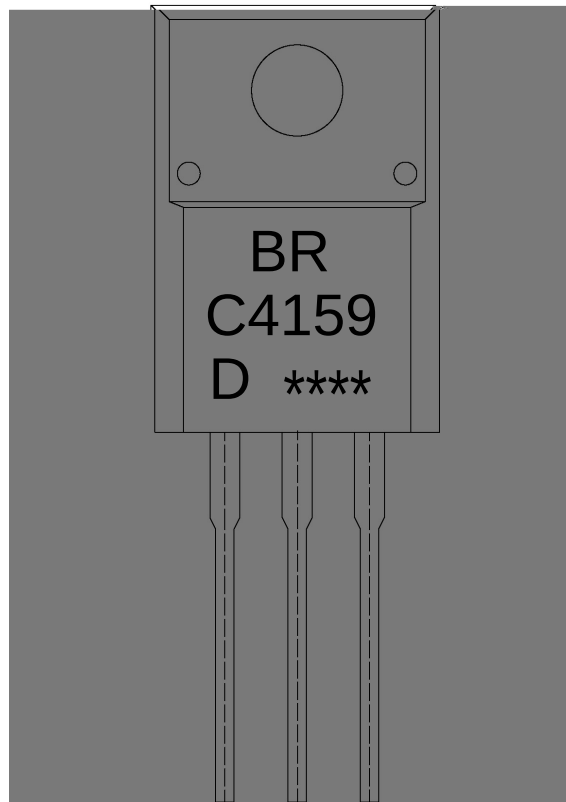
High voltage.

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	180	V
Collector to Emitter Voltage	V_{CEO}	160	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current - Continuous	I_C	1.5	A
Collector Current – Continuous(Pulse)	I_{cp}	3.0	A
Collector Power Dissipation	$P_C(T_c=25^\circ C)$	15	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=1.0mA$ $I_E=0$	180			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0mA$ $R_{BE}=\infty$	160			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=1.0mA$ $I_C=0$	6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=120V$ $I_E=0$			10	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=4.0V$ $I_C=0$			10	μA
DC Current Gain	h_{FE}	$V_{CE}=5.0V$ $I_C=300mA$	60		200	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$		0.3		V
Base to Emitter Voltage	V_{BE}	$V_{CE}=5.0V$ $I_C=10mA$			1.5	V
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=50mA$		100		MHz







BR

h_{FE}

Note:

BR: Company Code.

C4159: Product Type.

D: h_{FE} Classifications Symbol

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



- 1

25 150

60 90sec;
- 2

255 5

5 0.5sec;
- 3

2 10

/sec.
- Note:

1.Preheating:25~150 , Time:60~90sec.

2.Peak Temp.:255 5 , Duration:5 0.5sec.

3. Cooling Speed: 2~10 /sec.

270 5

10 1 sec.

Temp.:270±5

Time:10±1 sec

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180