

/ Descriptions

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

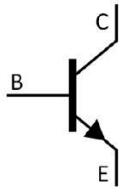
/ Features

High voltage, low collector output capacitance, collector metal(Fin) is fully covered with mold resin.

/ Applications

High voltage switching and amplifier, color TV horizontal driver and chroma output applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

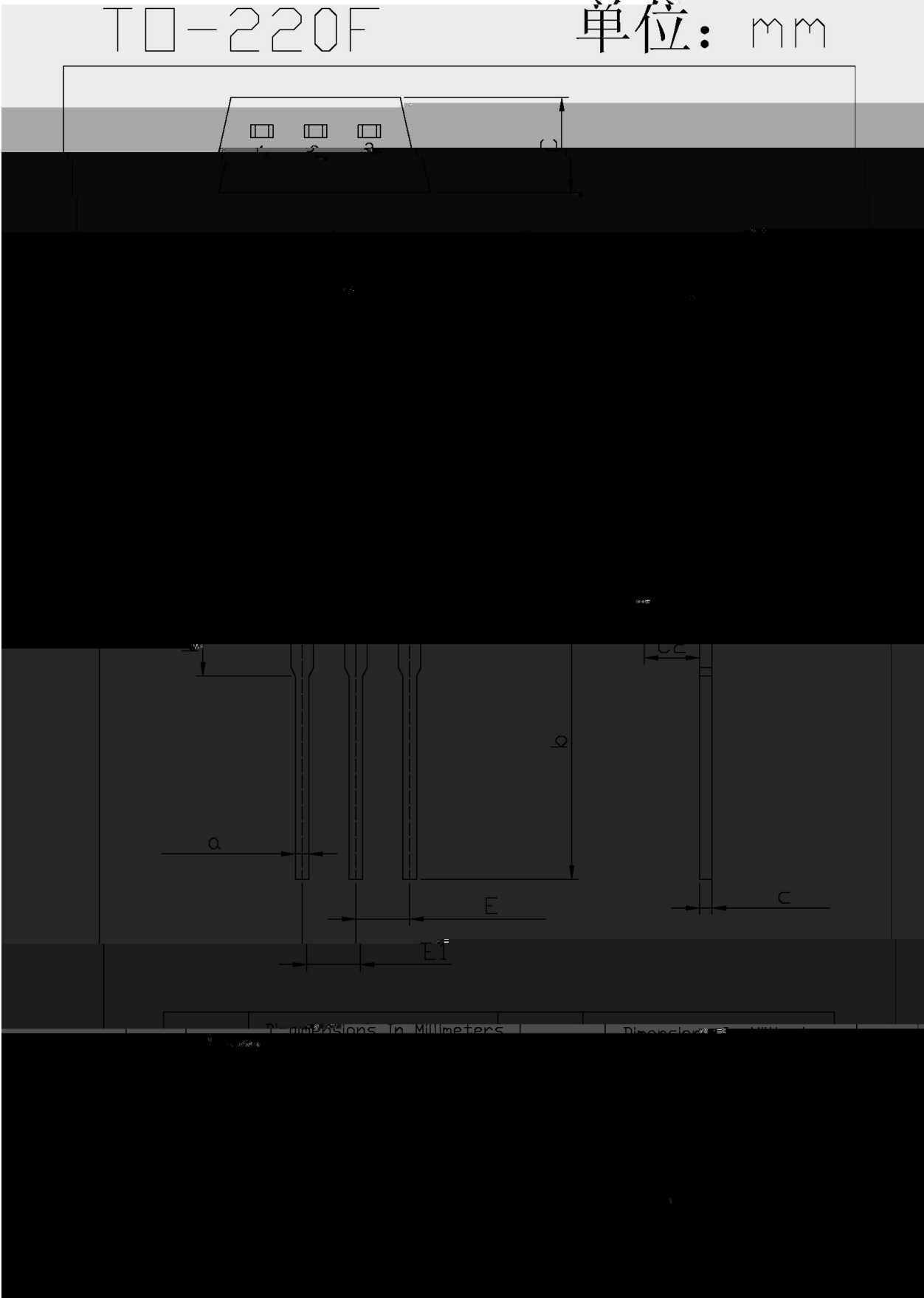
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	300	V
Collector to Emitter Voltage	V_{CEO}	300	V
Emitter to Base Voltage	V_{EBO}	7.0	V
Collector Current - Continuous	I_C	100	mA
Base Current - Continuous	I_B	10	mA
Collector Power Dissipation	P_C	2.0	W
	$P_C(T_C=25^{\circ}C)$	8.0	W
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-55~150	$^{\circ}C$

/ Electrical Characteristics(Ta=25)

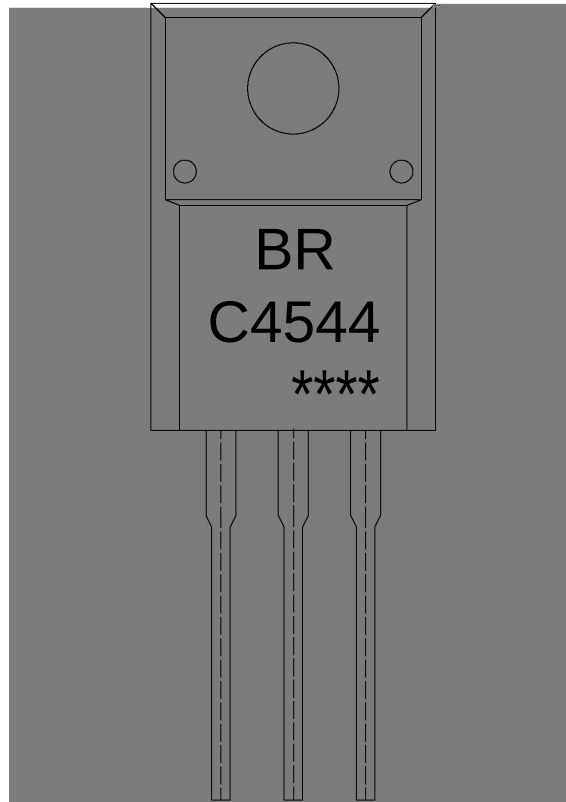
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=240V$ $I_E=0$			1.0	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=7.0V$ $I_C=0$			1.0	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=10V$ $I_C=20mA$	30		200	
	$h_{FE(2)}$	$V_{CE}=10V$ $I_C=4.0mA$	20			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10mA$ $I_B=1.0mA$			1.0	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=10mA$ $I_B=1.0mA$			1.0	V
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=20mA$	50	70		MHz
Collector output capacitance	C_{ob}	$V_{CB}=20V$ $f=1.0MHz$ $I_E=0$		3.0		pF

2SC4544

/ Package Dimensions



/ Marking Instructions



BR

C4544

Note:

BR: Company Code.

C4544: 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
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/ Packaging SPEC.

/ 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	