

**/ Descriptions**

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

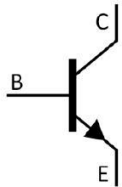
**/ Features**

Low Saturation Voltage, Excellent DC current characteristics.

**/ Applications**

Applications for pillow distortion adjustment for Color TV and low voltage adjustment.

**/ Equivalent Circuit**



**/ Pinning**



PIN1 Base          PIN 2 Collector          PIN 3 Emitter

**/ h<sub>FE</sub> Classifications & Marking**

h <sub>FE</sub> Classifications Symbol	O	Y	GR
h <sub>FE</sub> Range	60 120	100 200	150 300

**/ Absolute Maximum Ratings(Ta=25 )**

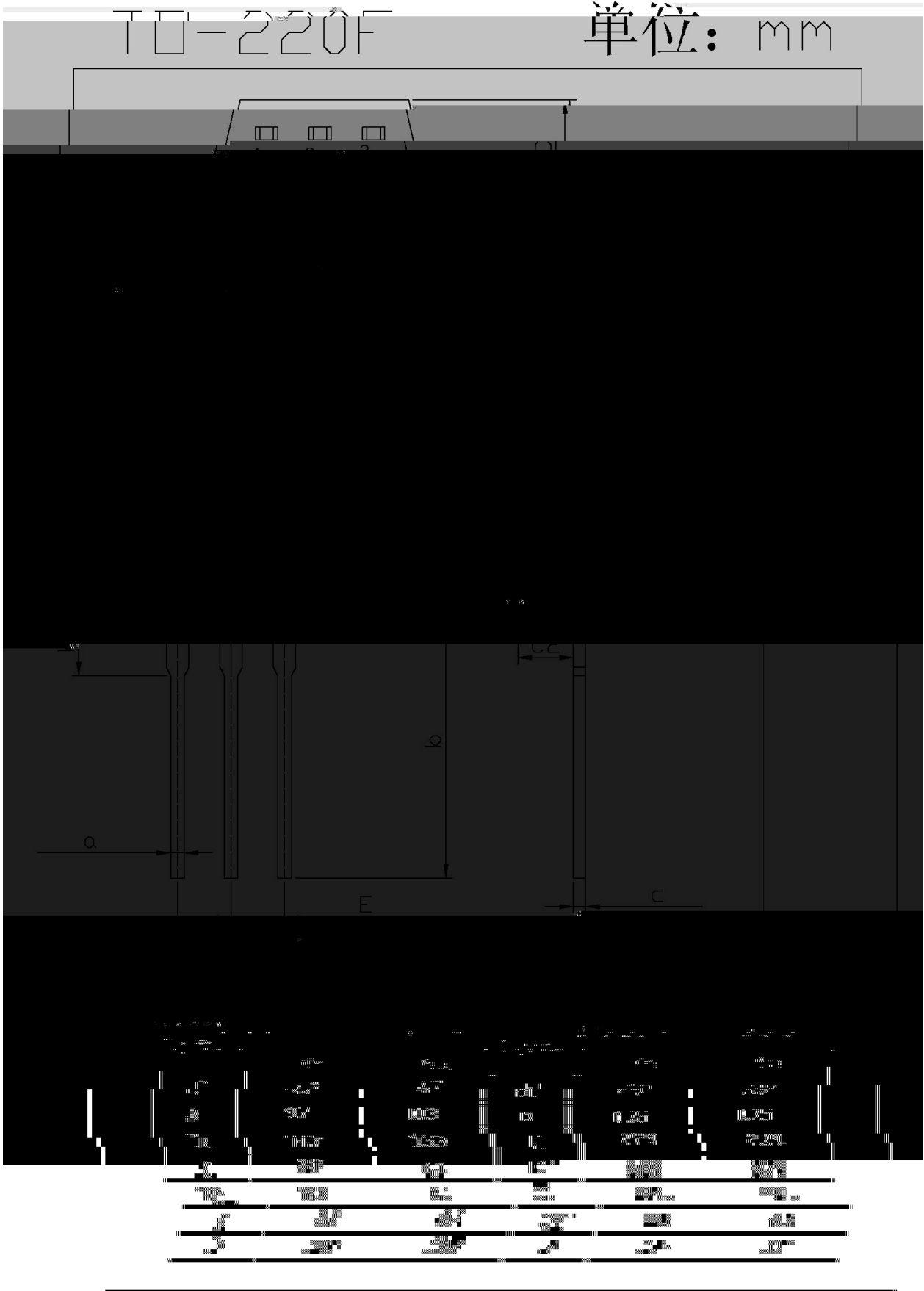
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	80	V
Collector to Emitter Voltage	$V_{CEO}$	80	V
Emitter to Base Voltage	$V_{EBO}$	7.0	V
Collector Current - Continuous	$I_C$	3.0	A
Collector Power Dissipation	$P_C$	2.0	W
Collector Power Dissipation	$P_C(T_c=25 )$	25	W
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	

**/ Electrical Characteristics(Ta=25 )**

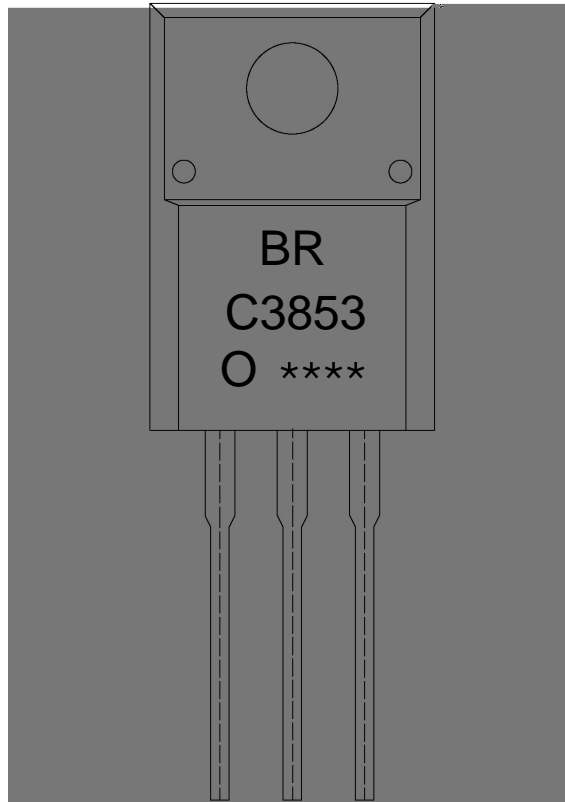
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=60V$ $I_E=0$			100	$\mu A$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=7.0V$ $I_C=0$			100	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=5.0V$ $I_C=500mA$	60		300	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3.0A$ $I_B=300mA$			1.0	V
Transition Frequency	$f_T$	$V_{CE}=5.0V$ $I_C=0.5A$	5			MHz



/ Package Dimensions



/ Marking Instructions



BR

C3853

O:  $h_{FE}$

\*\*\*\*

Note:

BR: Company Code.

C3853: Product Type.

O:  $h_{FE}$  Classifications Symbol

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

