

/ Descriptions

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

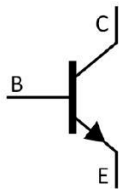
/ Features

Low Saturation Voltage, Excellent DC current characteristics.

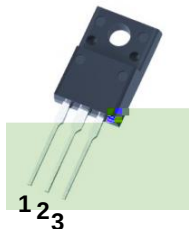
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	O	Y	GR
h_{FE} Range	60 120	100 200	150 300

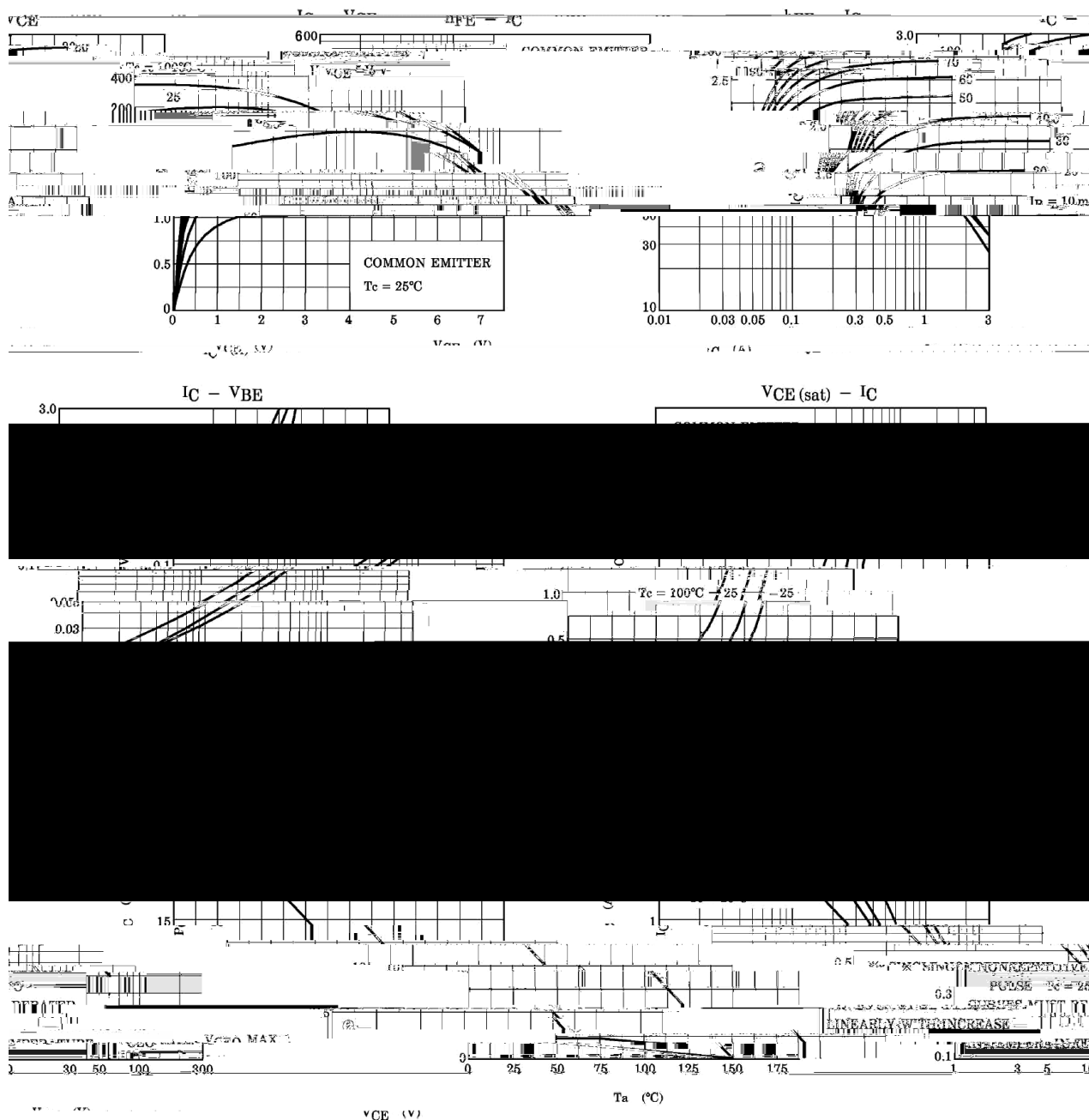
/ Absolute Maximum Ratings(Ta=25)

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	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=7.0V$ $I_C=0$			100	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

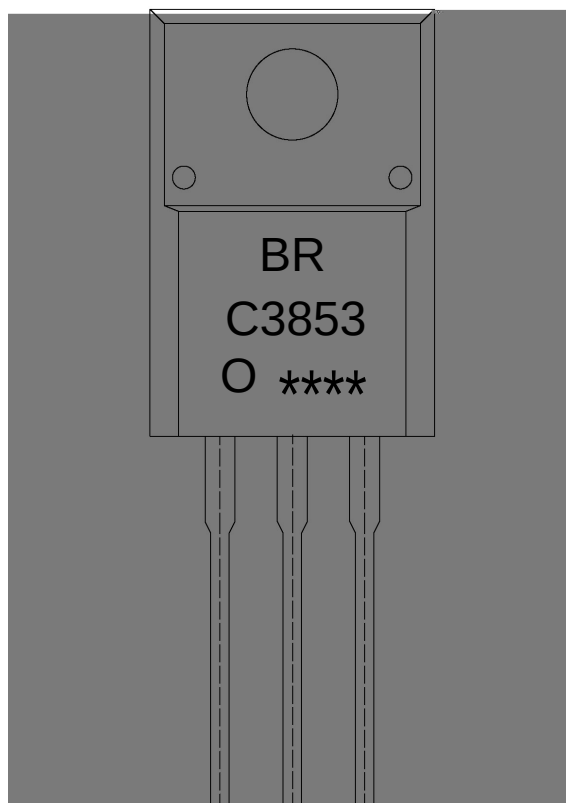
/ Electrical Characteristic Curve



/ 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.

