

/ Descriptions

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

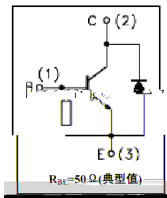
/ Features

High breakdown voltage, Low drain current, High switching speed, Low saturation voltage, Excellent current characteristics.

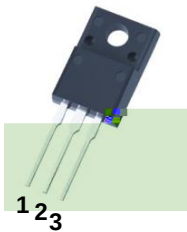
/ Applications

Color TV Horizontal deflection 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)

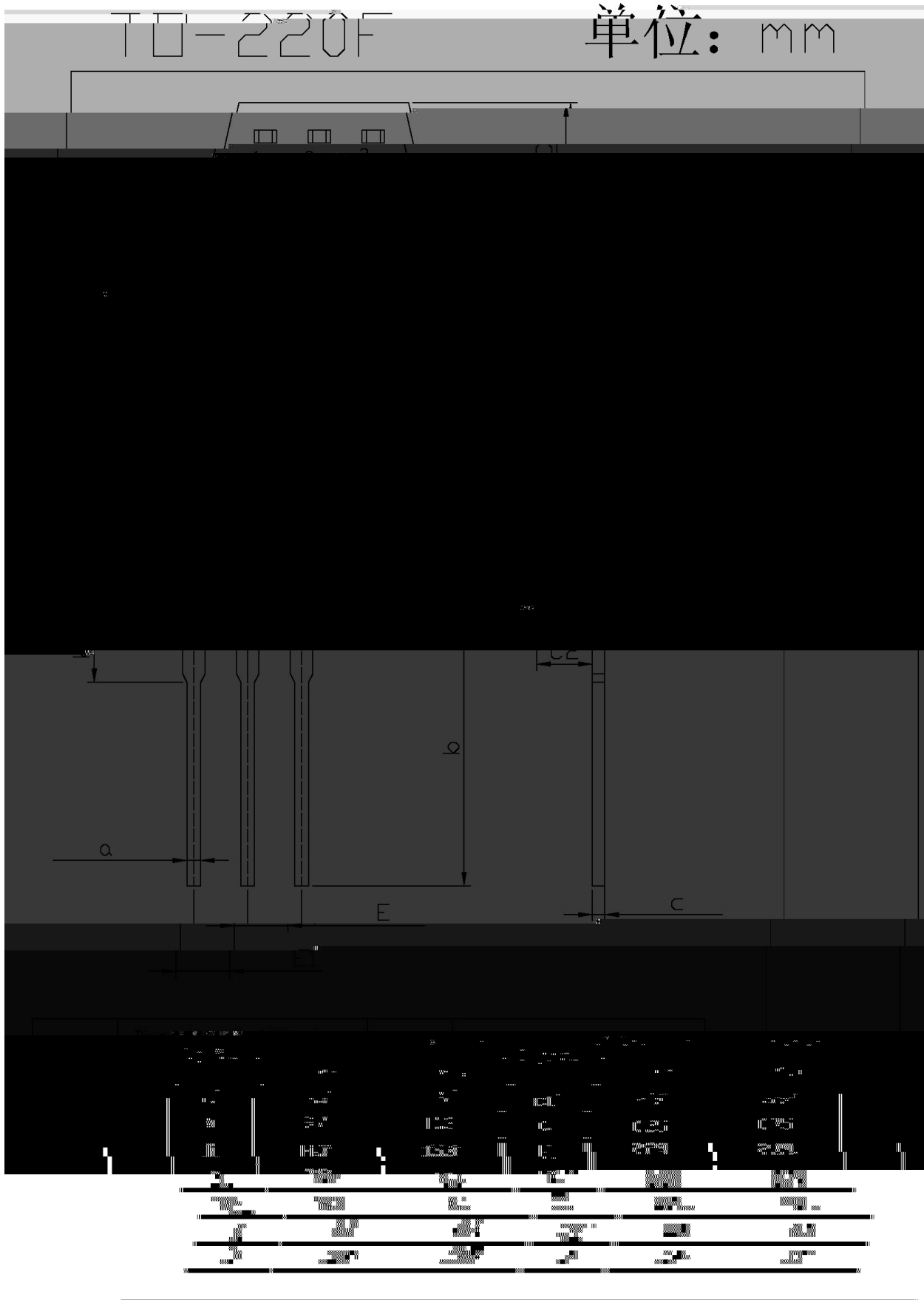
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	1500	V
Collector to Emitter Voltage	V_{CEO}	800	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	6.0	A
Collector Power Dissipation	P_C	2.0	W
Collector Power Dissipation	$P_C(T_c=25)$	40	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

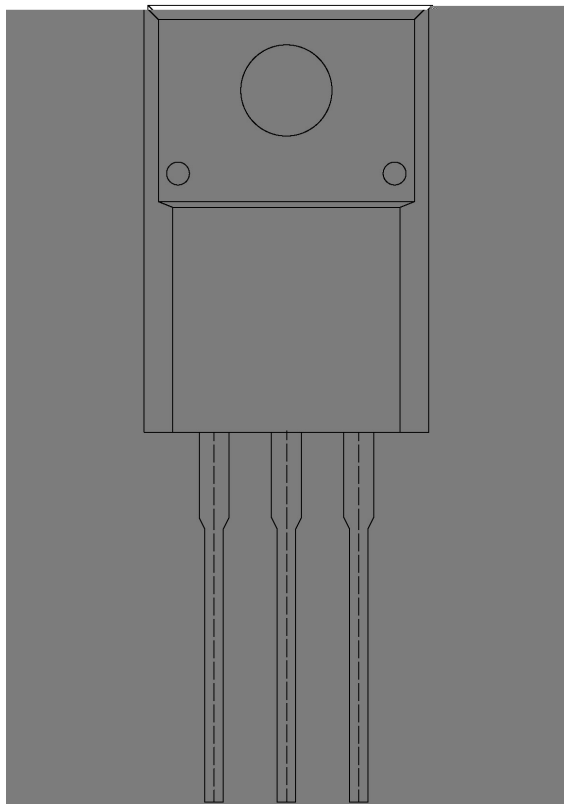
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=1500V$ $I_E=0$			1.0	mA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$	40		200	mA
DC Current Gain*	h_{FE}^*	$V_{CE}=5.0V$ $I_C=1.0A$	10		40	
Collector to Emitter Saturation Voltage*	$V_{CE(sat)}^*$	$I_C=4.5A$ $I_B=0.9A$			5.0	V
Base to Emitter Saturation Voltage*	$V_{BE(sat)}^*$	$I_C=4.5A$ $I_B=0.9A$			1.5	V
Fall Time	t_f	$2I_{B1}=-I_{B2}=1.0A$ $V_{CC}=100V$ $I_C=5.0A$			1.0	μs
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=0.1A$ $f=0.3MHz$	2			MHz

*: $t_p \leq 300\mu s, \delta \leq 2\%$

/ Package Dimensions



/ Marking Instructions



BR

DD5024

Note:

BR: Company Code.

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