



TO-220F Plastic-Encapsulate Transistors

3DA5371 TRANSISTOR (NPN)

FEATURES

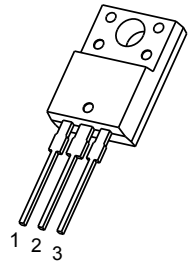
- Breakdown Voltage High
- Reverse Cut-off Current Small
- Saturation Voltage Low
- Power dissipation

P_{CM} : 1.5W ($T_a=25.$)

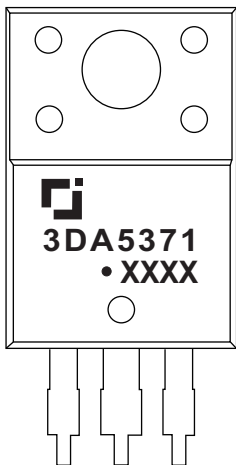
25 W ($T_c=25.$)

TO-220F

1. BASE
2. COLLECTOR
3. EMITTE



MARKING

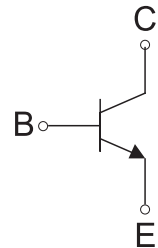


3DA5371=Device code

Solid dot=Green moldinn compound device,
if none,the normal device

XXXX=Code

Equivalent Circuit



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	180	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	1.5	A
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55-150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

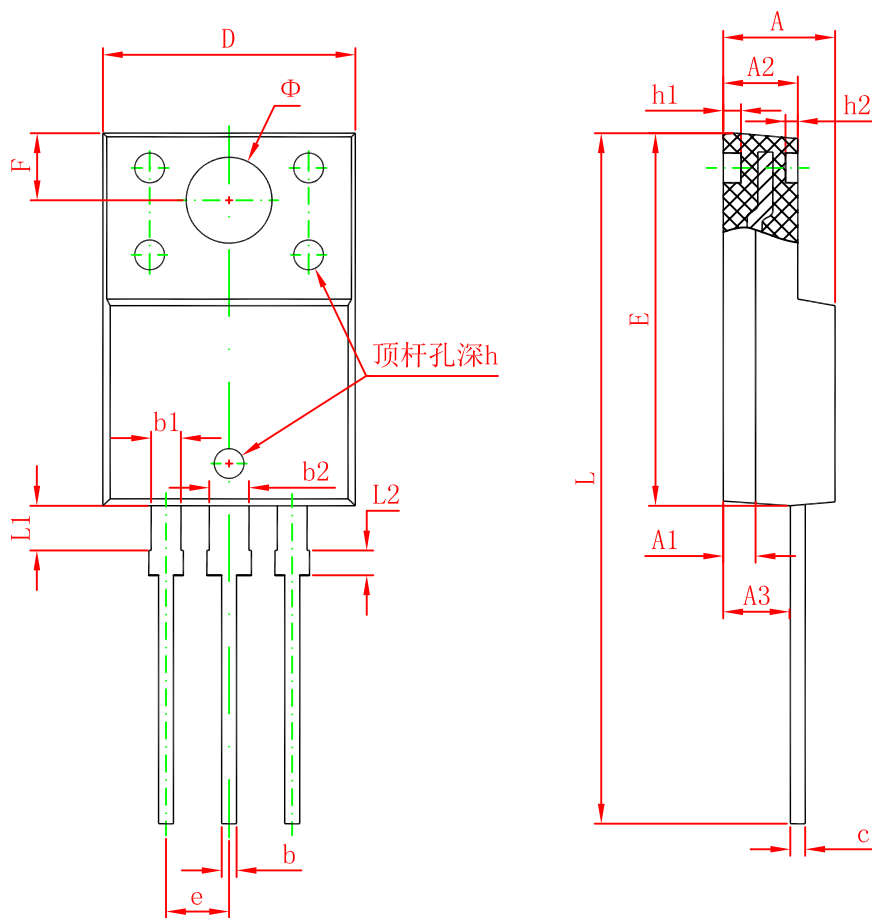
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =1mA, I _E =0	180			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =10mA, I _B =0	160			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	6			V
Collector cut-off current	I _{CBO}	V _{CB} =180V, I _E =0			10	μA
Emitter cut-off current	I _{EBO}	V _{EB} =6V, I _C =0			10	μA
DC current gain	h _{FE} *	V _{CE} =5V, I _C =200mA	60		240	
Collector-emitter saturation voltage	V _{CE(sat)} *	I _C =500mA, I _B =50mA			1	V
Transition frequency	f _T	V _{CE} =10V, I _C =50mA	50			MHz

*Pulse test: t_p≤300μS, δ≤0.02.

CLASSIFICATION OF h_{FE}

Rank	O	R
Range	60-140	100-240

TO-220F Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.300	4.700	0.169	0.185
A1	1.300 REF.		0.051 REF.	
A2	2.800	3.200	0.110	0.126
A3	2.500	2.900	0.098	0.114
b	0.500	0.750	0.020	0.030
b1	1.100	1.350	0.043	0.053
b2	1.500	1.750	0.059	0.069
c	0.500	0.750	0.020	0.030
D	9.960	10.360	0.392	0.408
E	14.800	15.200	0.583	0.598
e	2.540 TYP.		0.100 TYP.	
F	2.700 REF.		0.106 REF.	
Φ	3.500 REF.		0.138 REF.	
h	0.000	0.300	0.000	0.012
h1	0.800 REF.		0.031 REF.	
h2	0.500 REF.		0.020 REF.	
L	28.000	28.400	1.102	1.118
L1	1.700	1.900	0.067	0.075
L2	0.900	1.100	0.035	0.043