

TO-220F Plastic-Encapsulate Transistors

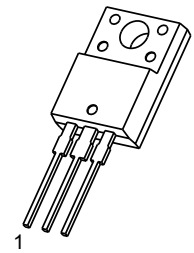
3CA1837 TRANSISTOR (PNP)

FEATURES

- Complementary to 3DA4793
- Collector Power Dissipation
 $P_{CM} : 2W (T_{amb}=25.)$
 $20 W (T_{case}=25.)$

TO-220F

1. BASE
2. COLLECTOR
3. EMITTE



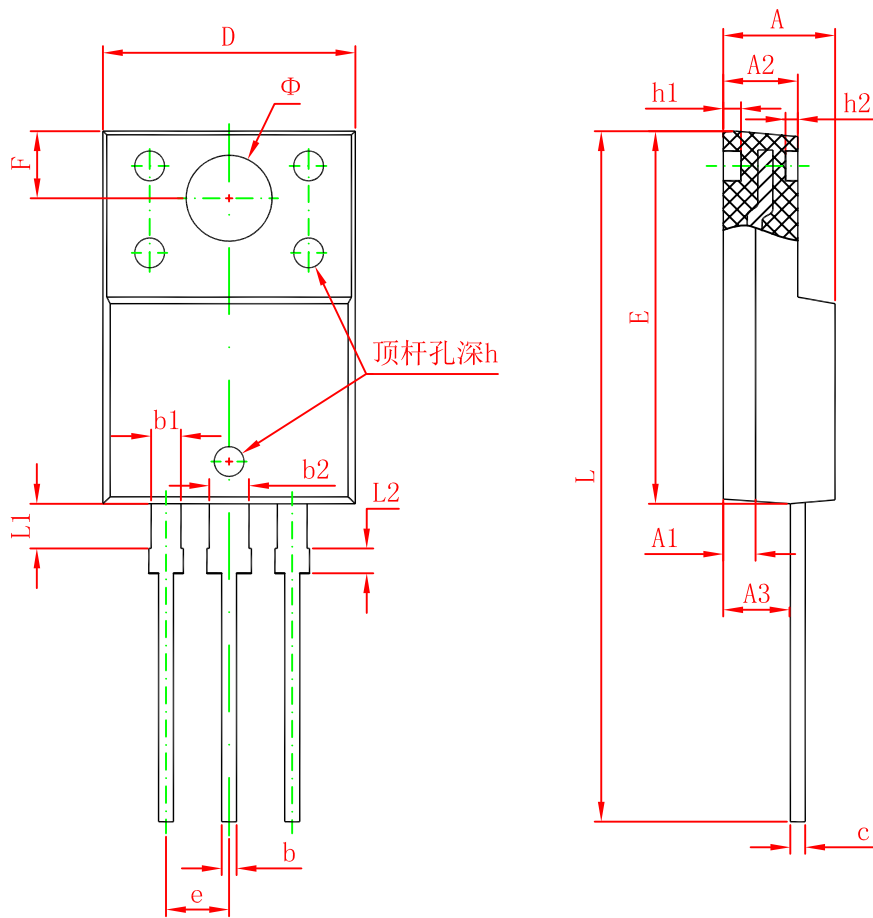
MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-230	V
V_{CEO}	Collector-Emitter Voltage	-230	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-1	A
P_C	Collector Power Dissipation	1.5	W
T_J	Junction temperature	150	$^{\circ}C$
T_{stg}	Storage temperature	-55-150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-230			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-230			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-230V, I_E=0$			-10	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5V, I_C=0$			-10	μA
DC current gain	h_{FE}	$V_{CE}=-5V, I_C=-100mA$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500mA, I_B=-50mA$			-1.5	V
Transition frequency	f_T	$V_{CE}=-10V, I_C=-100mA$	30			MHz

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