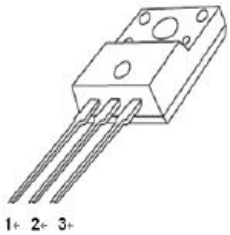
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-220F Plastic-Encapsulate Transistors

TIP42CF TRANSISTOR (PNP)

TO-220F



1. BASE
2. COLLECTOR
3. EMITTER

FEATURES

- Large current capacitance
- Complementary NPN Types:TIP41CF

APPLICATIONS

- Medium power linear switching applications

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

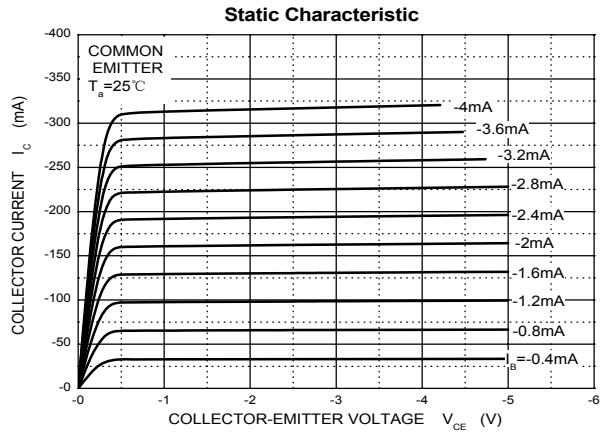
Parameter	Symbol	Limit	Unit
Collector-Base Voltage	V_{CBO}	-100	V
Collector-Emitter Voltage	V_{CEO}	-100	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-6	A
Collector Power Dissipation	P_C	2	W
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	62.5	℃/W
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55~+150	℃

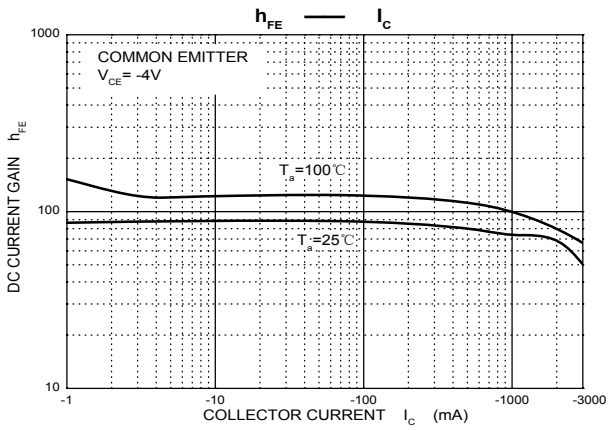
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

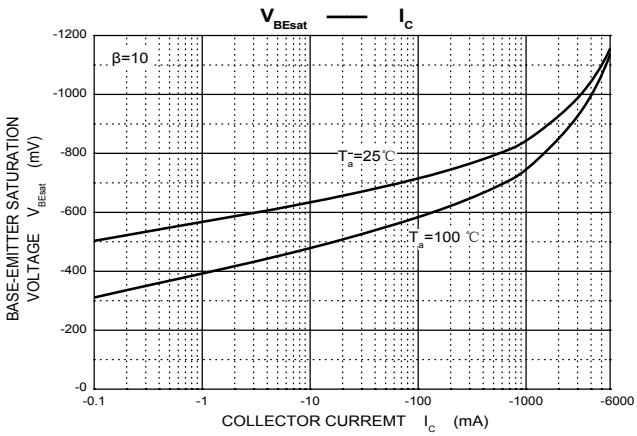
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-1mA,I_E=0	-100			V
Collector-emitter Sustaining voltage	$V_{CEO(SUS)}$*	I_C=-30mA,I_B=0	-100			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-1mA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-100V,I_E=0			-400	μA
Collector cut-off current	I_{CEO}	V_{CE}=-60V,I_B=0			-700	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-1	mA
DC current gain	$h_{FE(1)}$	V_{CE}=-4V, I_C=-0.3A	30			
	$h_{FE(2)}$	V_{CE}=-4V, I_C=-3A	15		75	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-6A,I_B=-0.6A			-1.5	V
Base-emitter voltage	V_{BE}	V_{CE}=-4V, I_C=-6A			-2	V
Transition frequency	f_T	V_{CE}=-10V,I_C=-0.5A	3			MHz

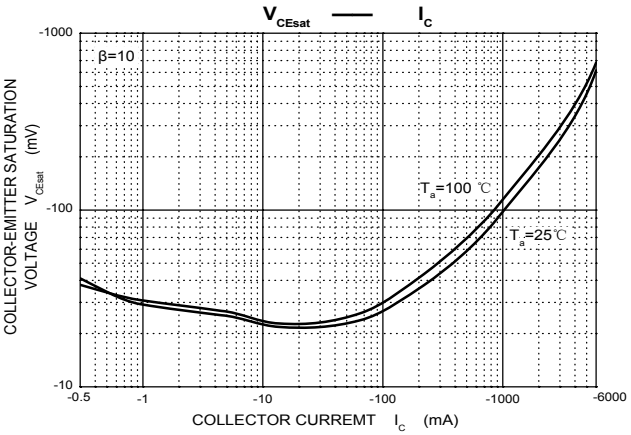
Notes: Pulse Test : Pulse Width≤300μs, duty cycle ≤2%.

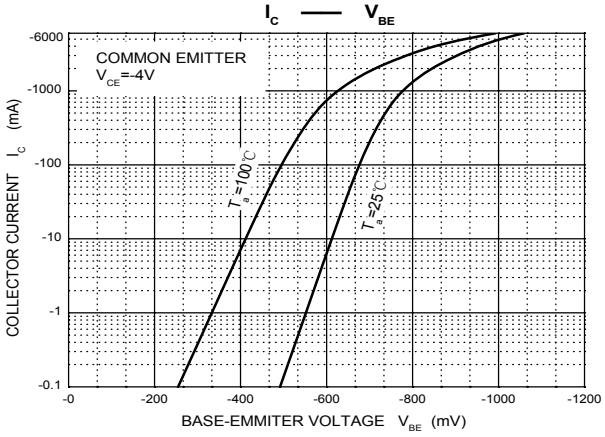
Typical Characteristics

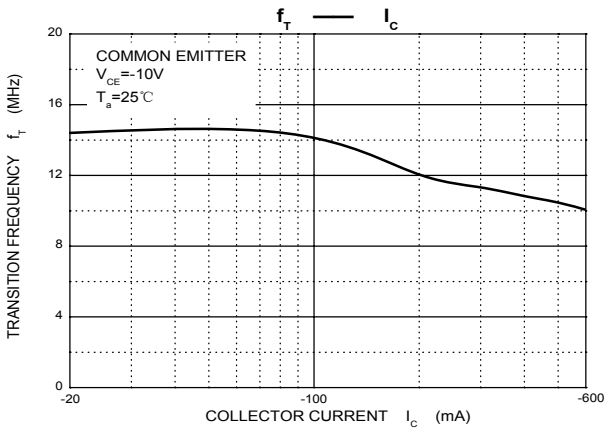


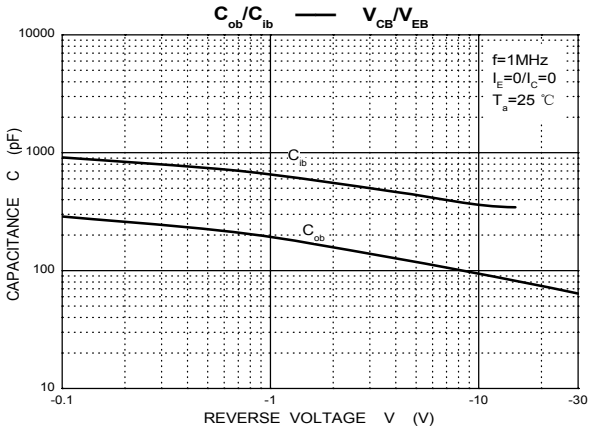


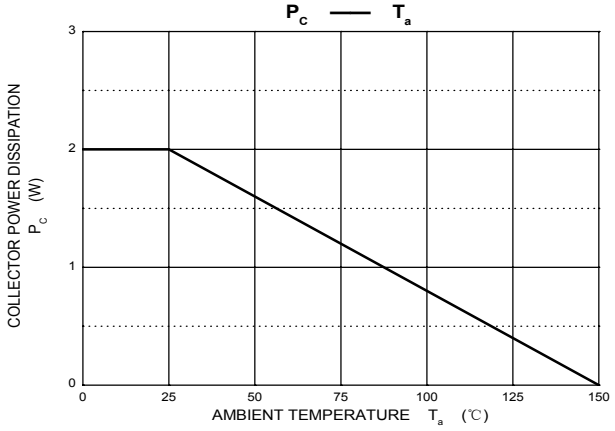




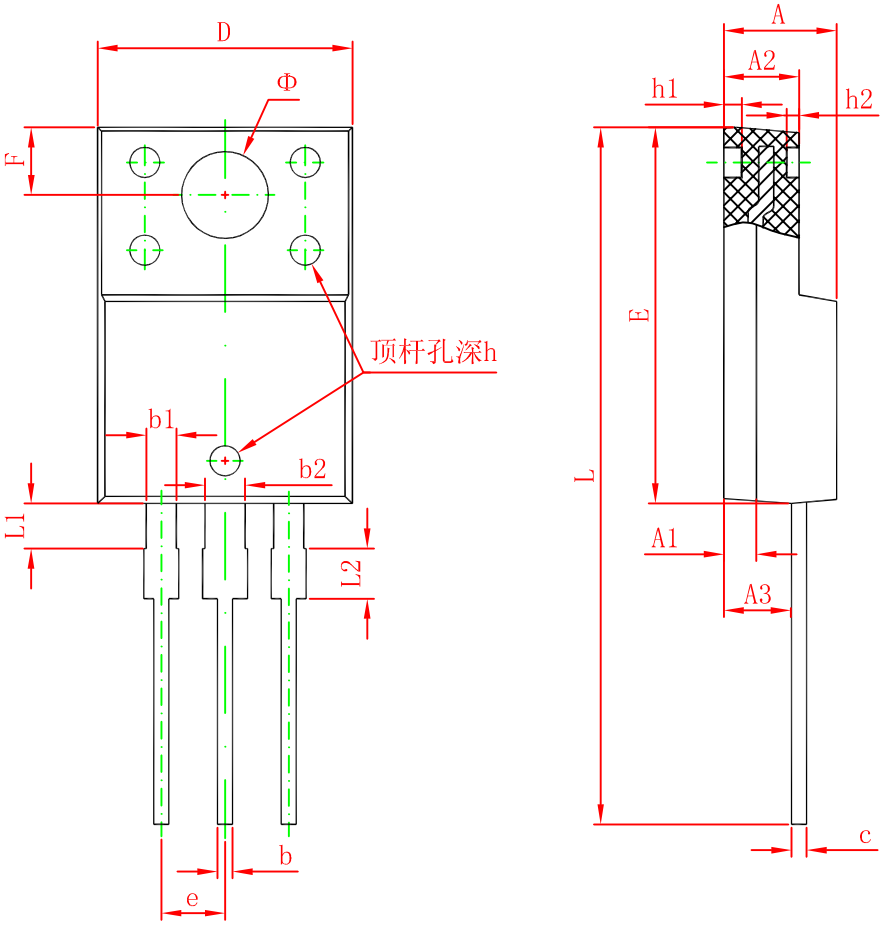








TO-220F Package Outline Dimensions



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	1.900	2.100	0.075	0.083