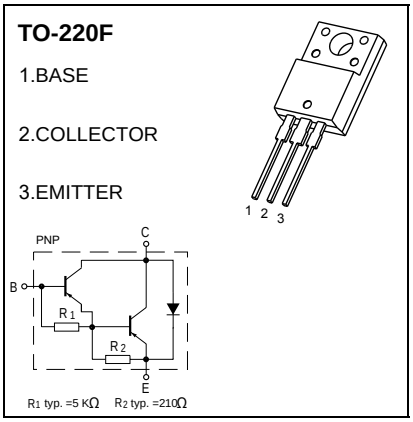
SZCJ

Shenzhen Changji Semiconductor Co., LTD.

TO-220F Plastic-Encapsulate Transistors

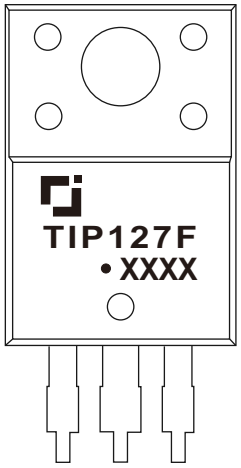
TIP127F DARLINGTON TRANSISTOR (PNP)



FEATURES

- Medium Power Complementary Silicon Transistors

MARKING



TIP127F=Device code
Solid dot=Green moldinn compound device,
if none,the normal device
XXXX=Code

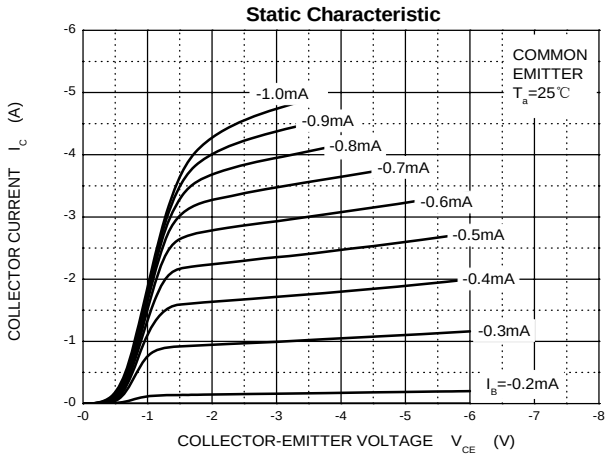
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

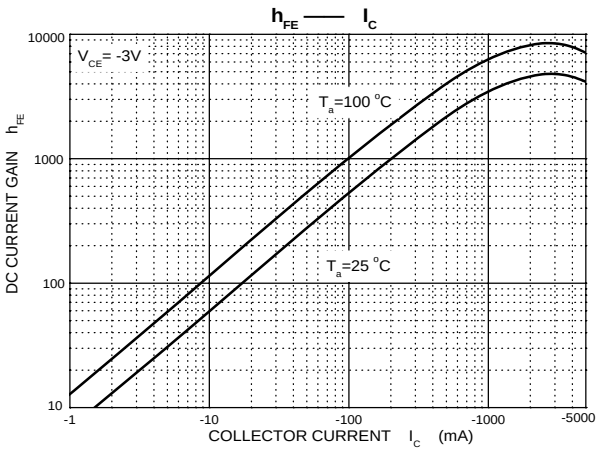
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-5	A
P_C	Collector Power Dissipation	2	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	62.5	℃/W
$R_{\theta JC}$	Thermal Resistance, Junction to Case	1.92	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

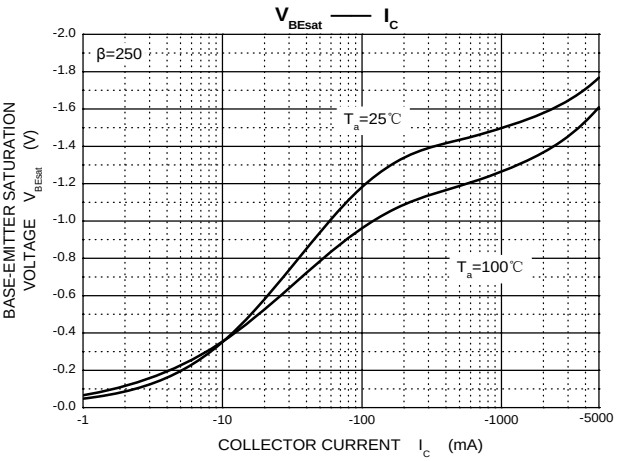
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

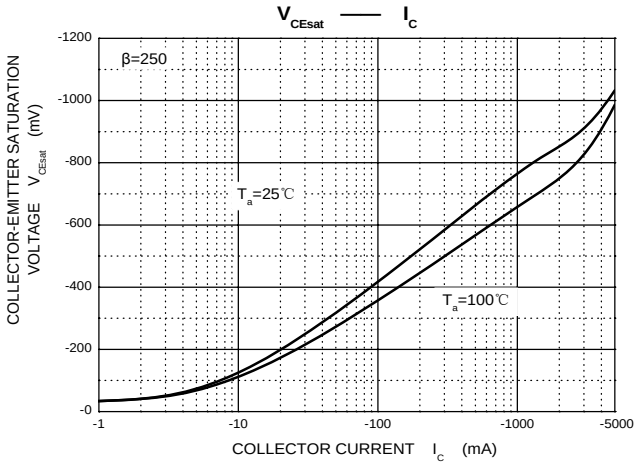
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -1mA,I_E=0	-100		V
Collector-emitter breakdown voltage	$V_{CEO(SUS)}$	I_C= -30mA,I_B=0	-100		V
Collector cut-off current	I_{CBO}	V_{CB}=-100V, I_E=0		-0.2	mA
Collector cut-off current	I_{CEO}	V_{CE}=-50 V, I_B=0		-0.5	mA
Emitter cut-off current	I_{EBO}	V_{EB}=-5 V, I_C=0		-2	mA
DC current gain	$h_{FE(1)}$	V_{CE}= -3V, I_C=-0.5A	1000		
	$h_{FE(2)}$	V_{CE}= -3V, I_C=-3 A	1000	12000	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-3A,I_B=-12mA I_C=-5 A,I_B=-20mA		-2 -4	V
Base-emitter voltage	V_{BE}	V_{CE}= -3V, I_C=-3 A		-2.5	V
Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0,f=0.1MHz		300	pF

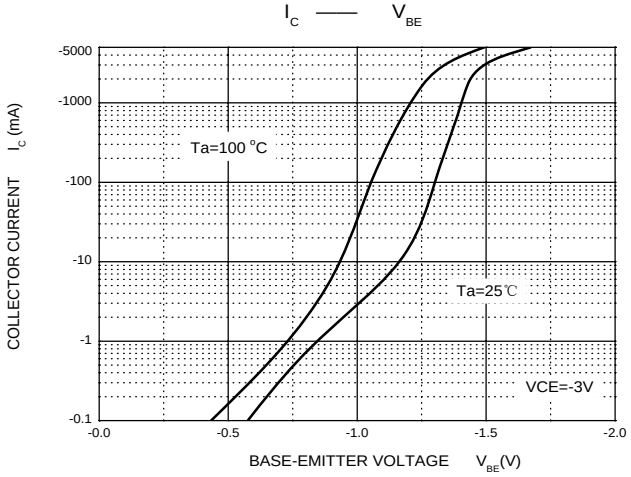
Typical Characteristics

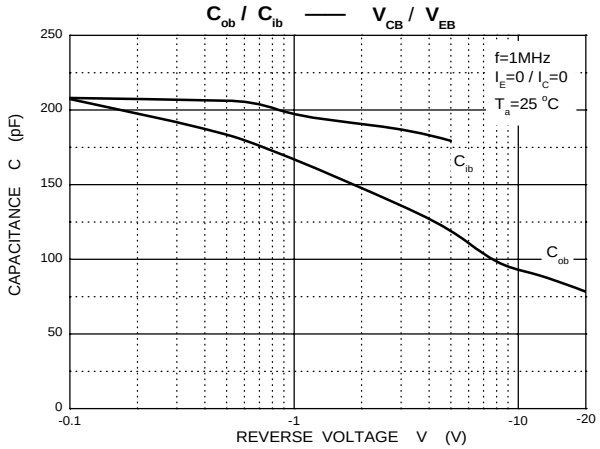


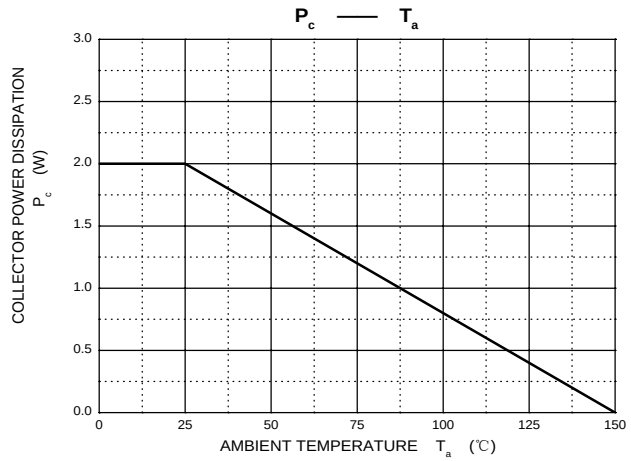




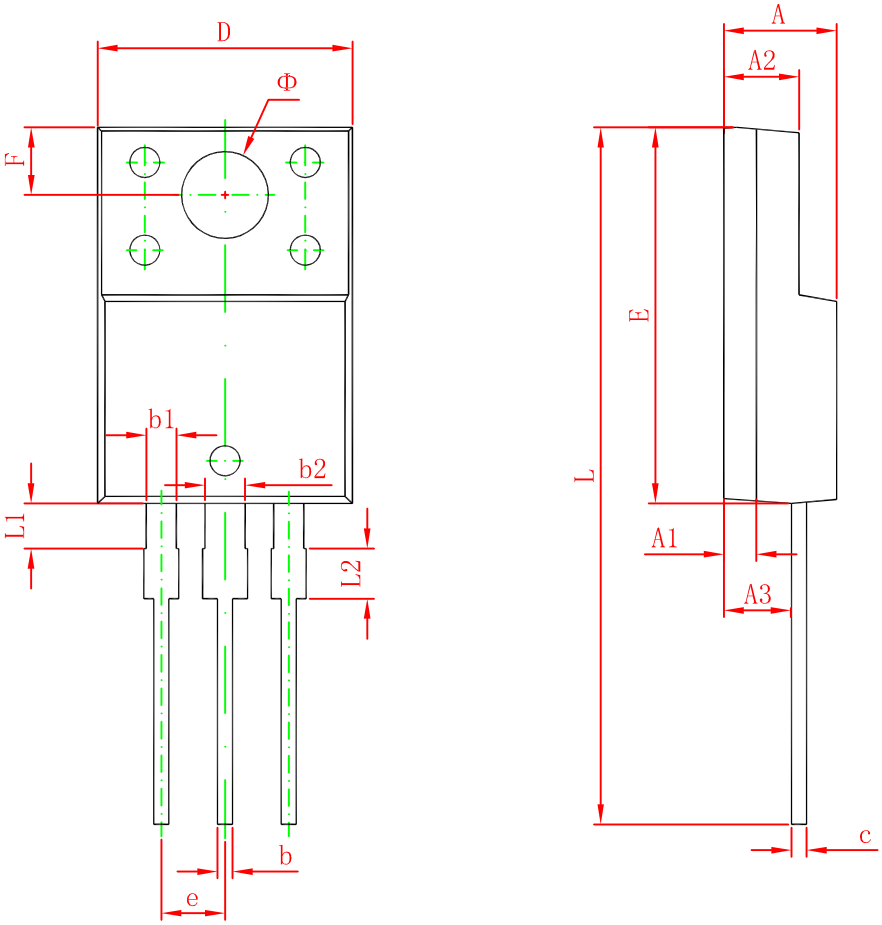








TO-220F Package Outline Dimensions



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	3.300	3.700	0.130	0.146
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