

Features

- Medium Power Linear Switching

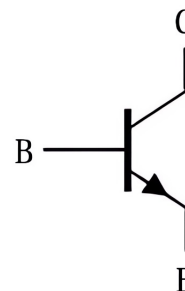
Applications

Marking

- TIP41CF



TO-220-3L top view



Schematic diagram



Pb-Free



RoHS



Halogen-Free

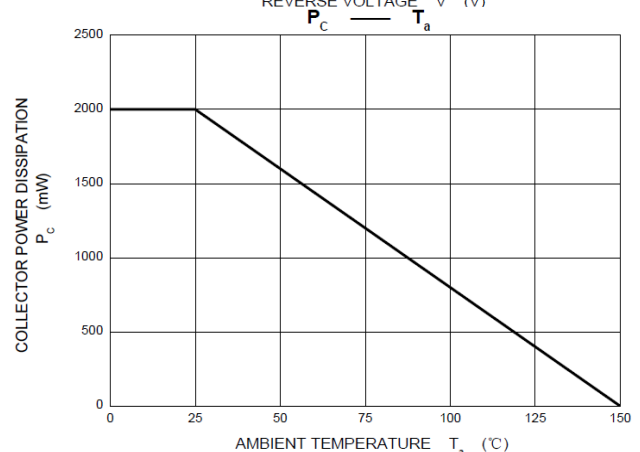
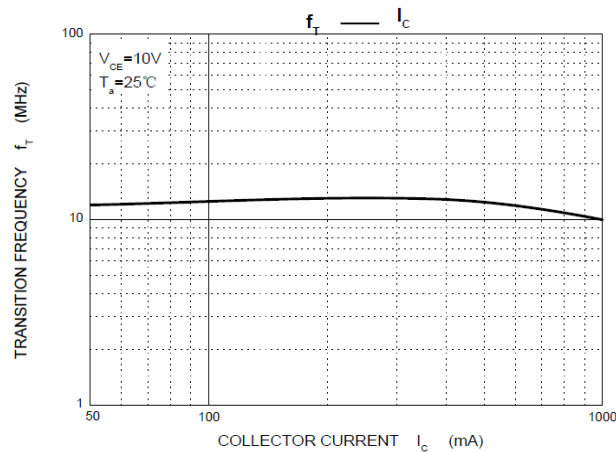
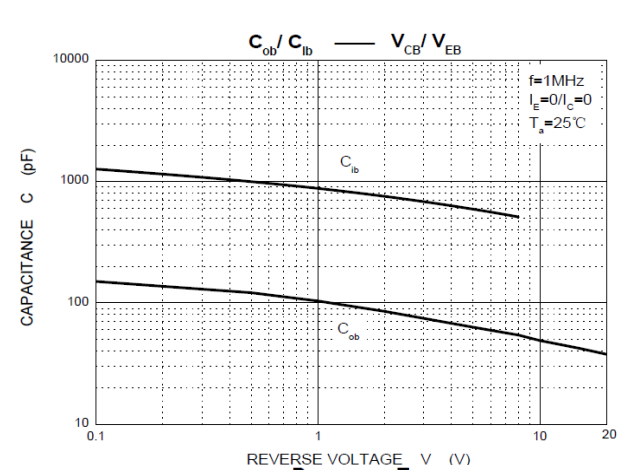
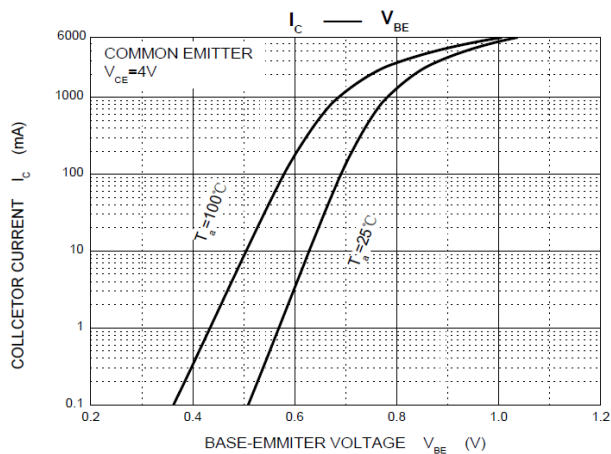
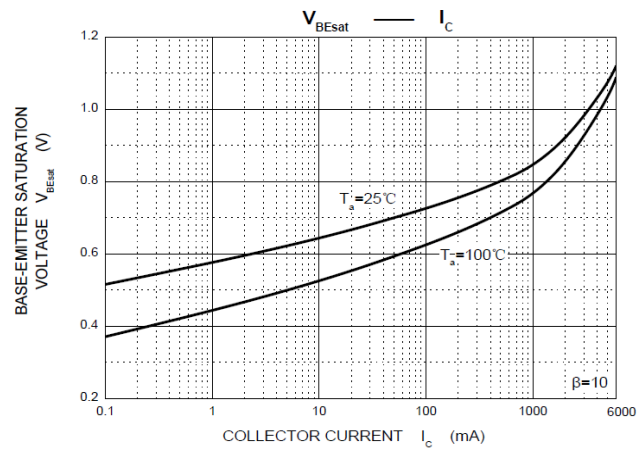
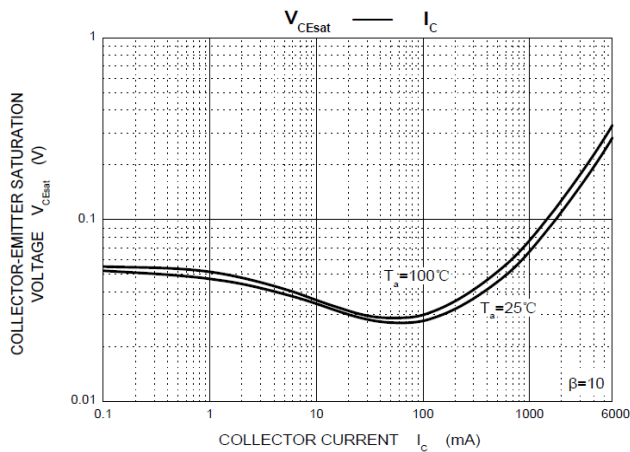
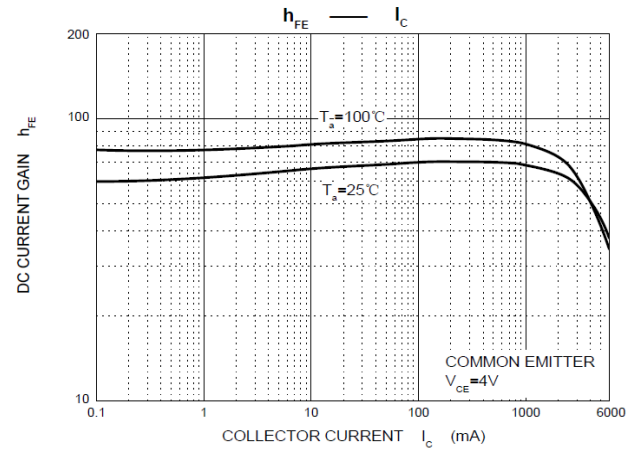
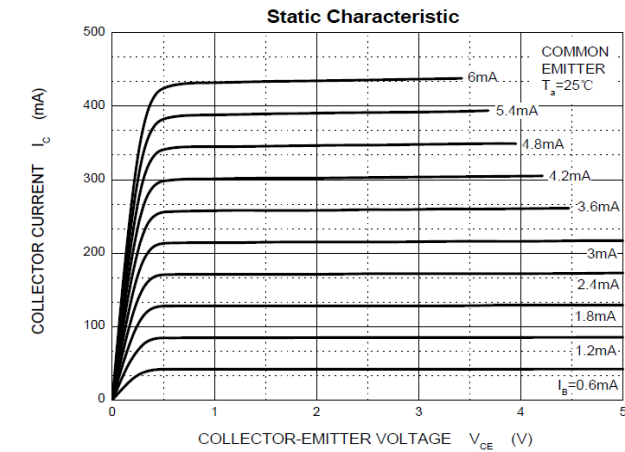
MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

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	6	A
P_C	Collector Power Dissipation	2	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	62.5	°C/W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~ + 150	°C

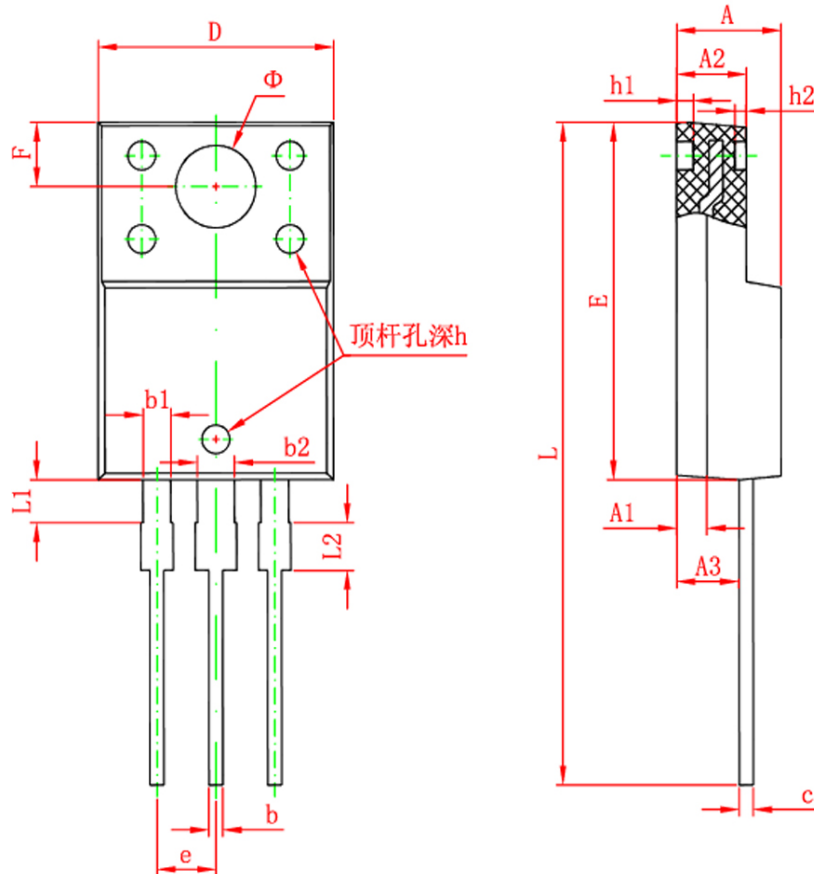
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Symbol	Parameter	Condition	Min	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=1mA, I_E=0$	100	--	V
$V_{CEO(SUS)}$	Collector-emitter breakdown voltage	$I_C=30mA, I_B=0$	100	--	V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_C=1mA, I_C=0$	5	--	V
I_{CBO}	Collector cut-off current	$V_{CB}=100V, I_E=0$	--	0.4	mA
I_{CEO}	Collector cut-off current	$V_{CE}=60V, I_B=0$	--	0.7	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V, I_C=0$	--	1	mA
$h_{FE(1)}$	DC current gain	$V_{CE}=4V, I_C=0.3A$	30	--	
$h_{FE(2)}$		$V_{CE}=4V, I_C=3A$	15	75	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=6A, I_B=0.6A$	--	1.5	V
$V_{BE(on)}$	Base-emitter voltage	$V_{CE}=4V, I_C=6A$	--	2	V
f_T	Transition frequency	$V_{CE}=10V, I_C=0.5, f=1MHz$	3	--	MHZ

Typical Operating Characteristics



TO-220F Package information



Symbol	Dimensions in Millimeters(mm)		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