

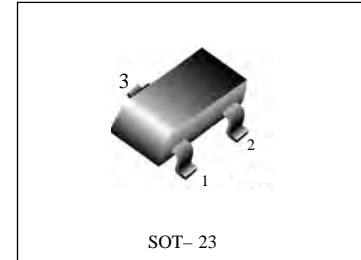
FTD1304 TRANSISTOR (NPN)

FEATURES

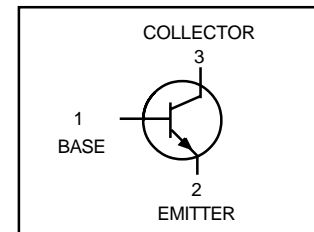
- High emitter-base voltage
- low on resistance

MARKING: HMAX

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



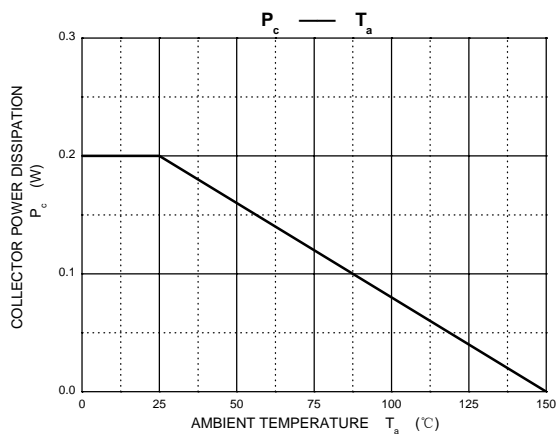
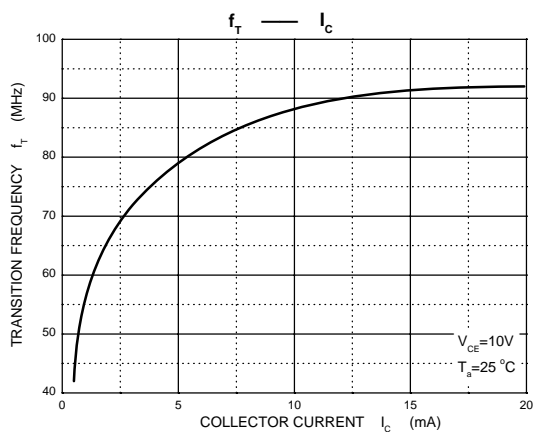
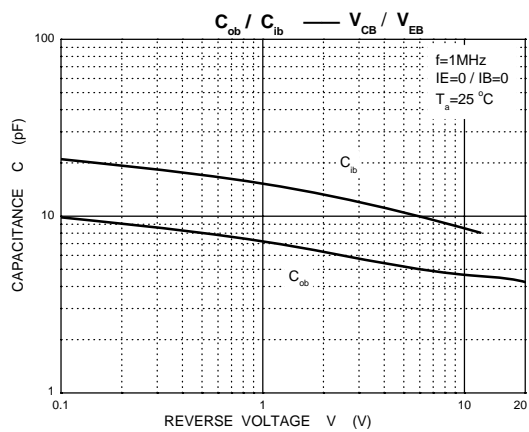
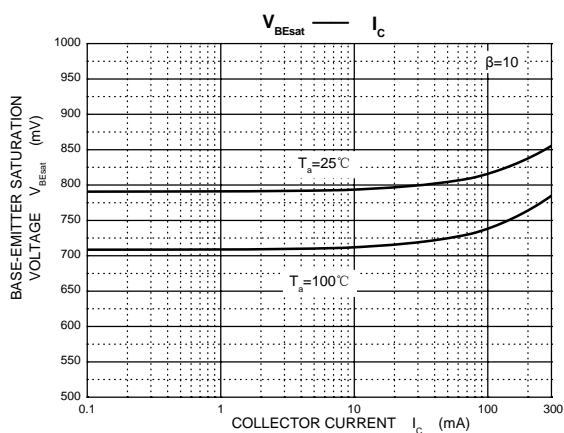
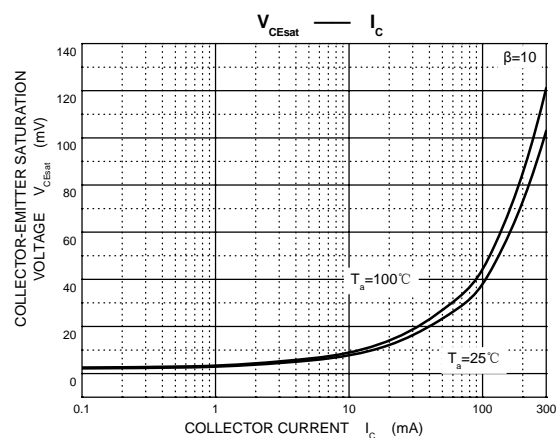
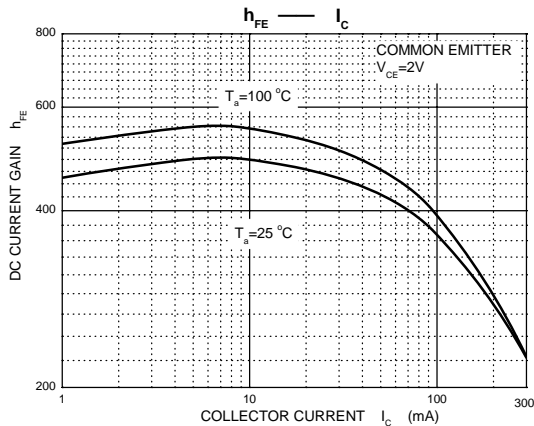
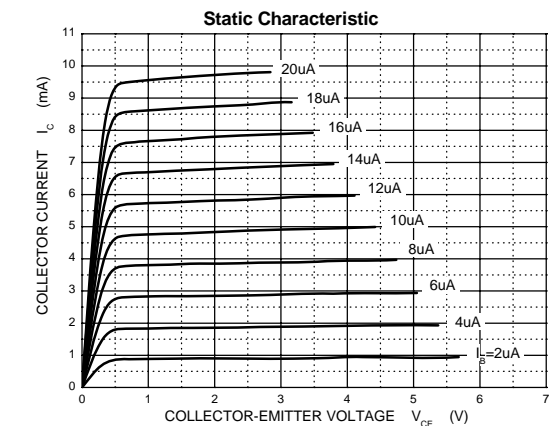
Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	25	V
V _{CEO}	Collector-Emitter Voltage	20	V
V _{EBO}	Emitter-Base Voltage	12	V
I _C	Collector Current -Continuous	0.3	A
P _C	Collector Power Dissipation	0.2	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C



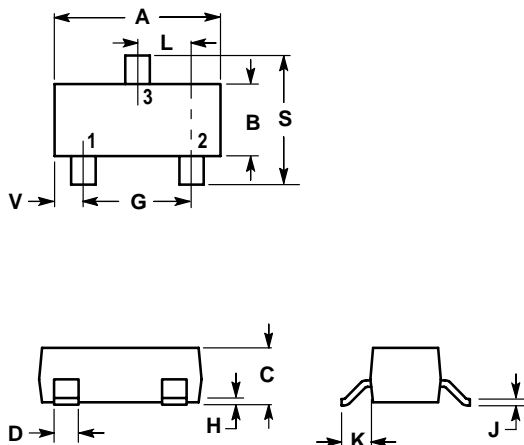
ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100μA, I _E =0	25			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	20			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	12			V
Collector cut-off current	I _{CBO}	V _{CB} =25 V, I _E =0			0.1	μ A
Emitter cut-off current	I _{EBO}	V _{EB} =12V, I _C =0			0.1	μ A
DC current gain	h _{FE} (FOR)	V _{CE} =2V, I _C =4 mA	200		1000	
	h _{FE} (REV)	V _{CE} = 2V, I _C = 4mA	20			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = 100mA, I _B =10 mA			0.25	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = 100mA, I _B =10mA			1	V
Transition frequency	f _T	V _{CE} =10V, I _C = 1mA f=100MHz		60		MHz
output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		10		pF
On resistance	R _(on)	V _{in} =0.3V, I _B =1mA, f=1KHz		0.6		Ω

Typical Characteristics



SOT-23



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

- P N 1. ANODE
 2. NO CONNECTION
 3. CATHODE

