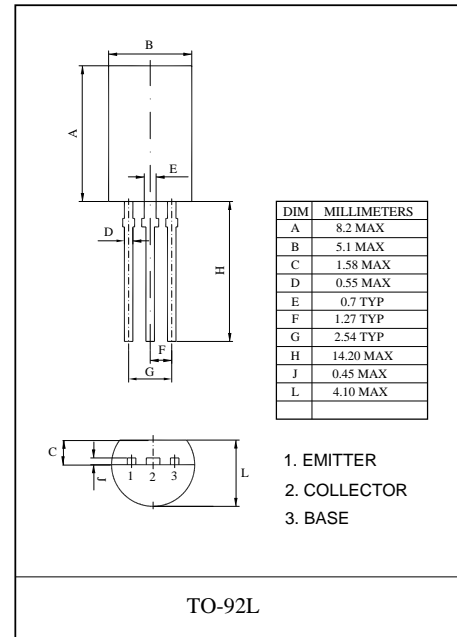


FTC2330 TRANSISTOR (NPN)

FEATURES

- High Collector-Emitter Breakdown Voltage
- Low Transition Frequency



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

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	300	V
V _{CEO}	Collector-Emitter Voltage	300	V
V _{EBO}	Emitter-Base Voltage	7	V
I _C	Collector Current	0.1	A
P _C	Collector Power Dissipation	0.75	W
R _{θJA}	Thermal Resistance From Junction To Ambient	167	°C/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	300			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =5mA, I _B =0	300			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	7			V
Collector cut-off current	I _{CBO}	V _{CB} =200V, I _E =0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =6V, I _C =0			0.1	μA
DC current gain	h _{FE}	V _{CE} =10V, I _C =20mA	40		240	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =10mA, I _B =1mA			0.5	V
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		4		pF
Transition frequency	f _T	V _{CE} =30V, I _C =10mA		50		MHz

CLASSIFICATION OF h_{FE}

RANK	R	O	Y
RANGE	40-80	70-140	120-240

Typical Characteristics

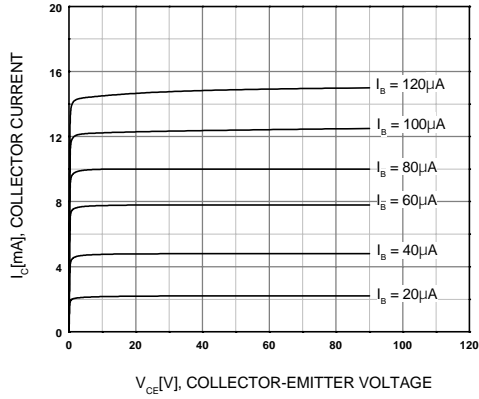


Figure 1. Static Characteristic

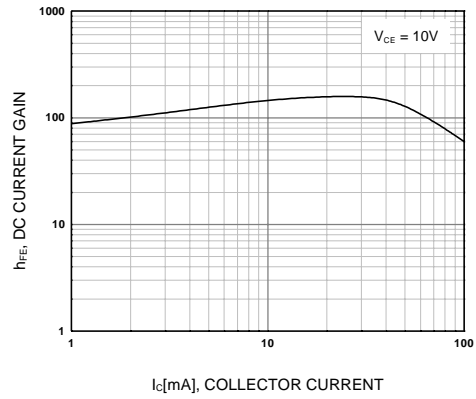


Figure 2. DC current Gain

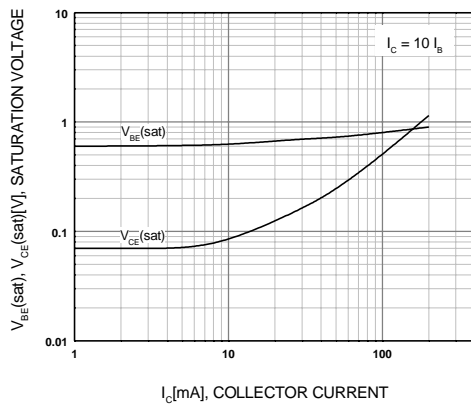


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

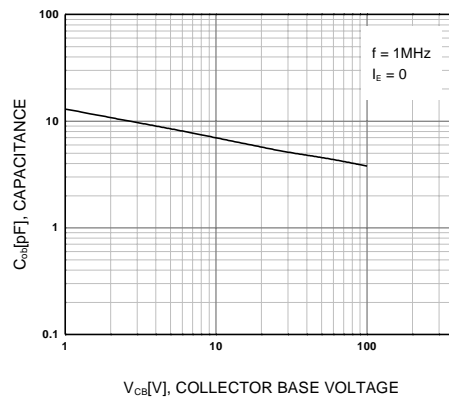


Figure 4. Collector Output Capacitance

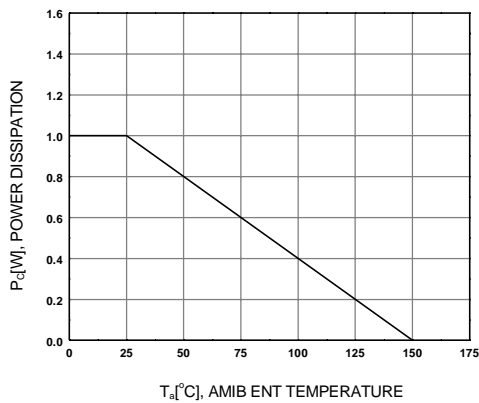


Figure 5. Power Derating