

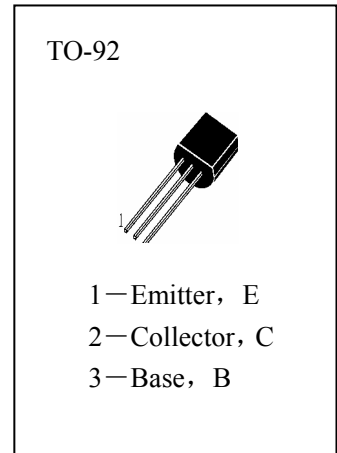


APPLICATIONS

General Purpose Amplifier Application.

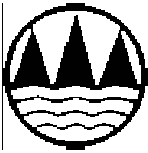
ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

- T_{stg}—Storage Temperature..... -55~150°C
- T_j—Junction Temperature.....150°C
- P_C—Collector Dissipation.....0.83W
- V_{CB0}—Collector-Base Voltage.....32V
- V_{CEO}—Collector-Emitter Voltage.....20V
- V_{EBO}—Emitter-Base Voltage.....5V
- I_C—Collector Current.....1A

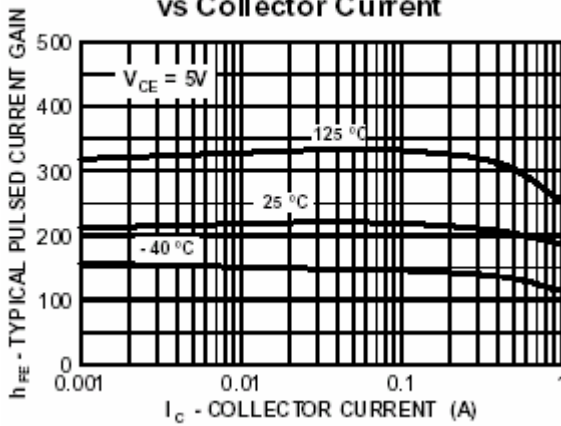


ELECTRICAL CHARACTERISTICS (Ta=25°C)

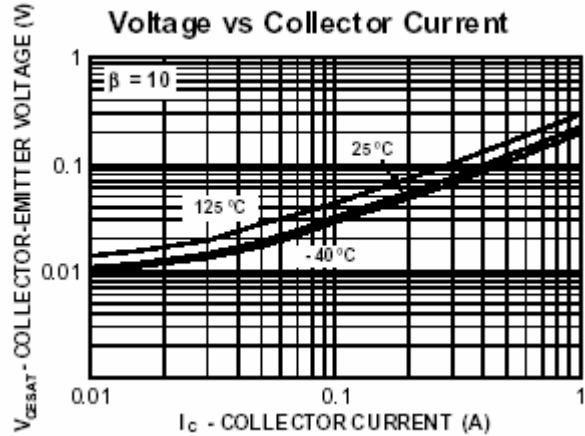
Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BVCBO	Collector-Base Breakdown Voltage	32			V	I _C =100 μ A, I _E =0
BVCEO	Collector-Emitter Breakdown Voltage	20			V	I _C =2mA, I _B =0
BVEBO	Emitter-Base Breakdown Voltage	5			V	I _E =100 μ A, I _C =0
H _{FE} (1)	DC Current Gain	85		375		V _{CE} =1V, I _C =500mA
H _{FE} (2)		50				V _{CE} =10V, I _C =5mA
H _{FE} (3)		60				V _{CE} =1V, I _C =1A
V _{CE(sat)}	Collector- Emitter Saturation Voltage			0.5	V	I _C =1A, I _B =100mA
V _{BE(on1)}	Base-Emitter On Voltage			1	V	V _{CE} =1V, I _C =1A
V _{BE(on2)}	Base-Emitter On Voltage			0.7	V	V _{CE} =10V, I _C =5mA
I _{CBO} (1)	Collector Cut-off Current			0.1	μ A	V _{CB} =25V, I _E =0
I _{CBO} (2)	Collector Cut-off Current			10	μ A	V _{CB} =25V, I _E =0, Ta=150°C
I _{EBO}	Emitter Cut-off Current			0.1	μ A	V _{EB} =5V, I _C =0
f _T	Current Gain-Bandwidth Product	40	170		MHz	V _{CE} =5V, I _C =50mA, f=100MHz
C _c	Collector Capacitance		22		pF	V _{CB} =10V, I _E =0, f=1MHz



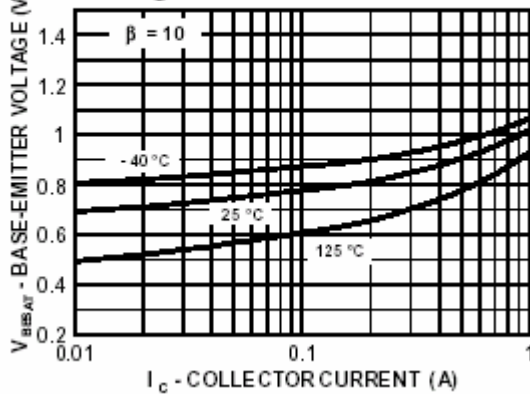
Typical Pulsed Current Gain vs Collector Current



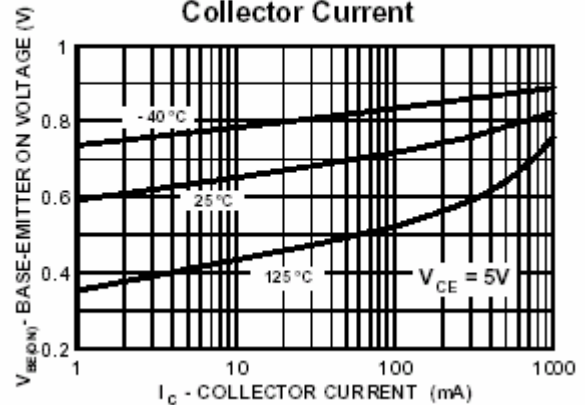
Collector-Emitter Saturation Voltage vs Collector Current



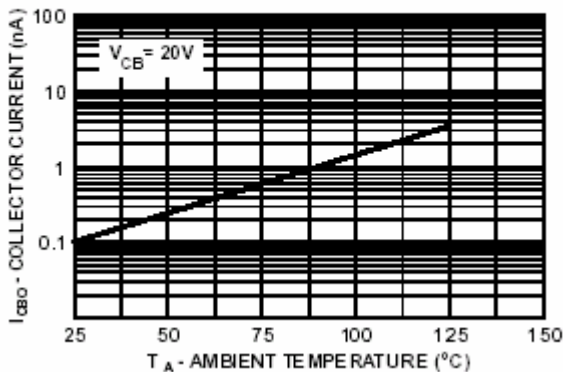
Base-Emitter Saturation Voltage vs Collector Current



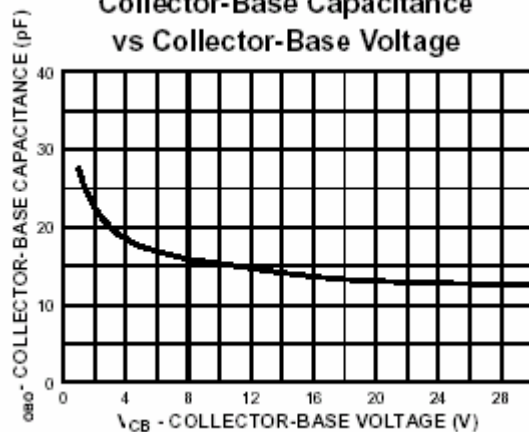
Base-Emitter ON Voltage vs Collector Current

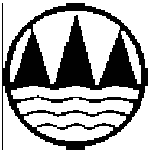


Collector-Cutoff Current vs Ambient Temperature

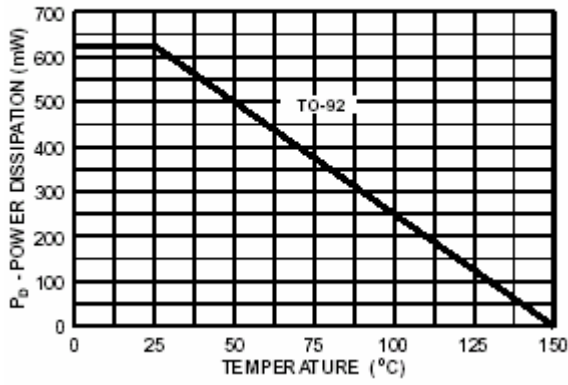


Collector-Base Capacitance vs Collector-Base Voltage





Power Dissipation vs Ambient Temperature



Power Dissipation vs Ambient Temperature

