

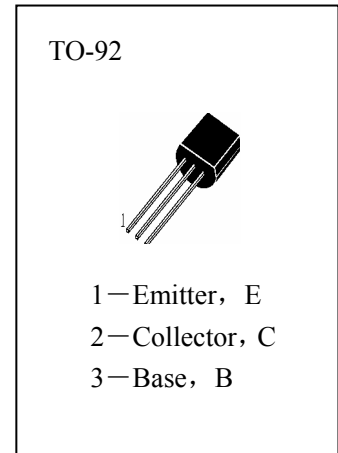


APPLICATIONS

General Purpose application..

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

- T<sub>stg</sub>—Storage Temperature..... -55~150°C
- T<sub>j</sub>—Junction Temperature.....150°C
- P<sub>C</sub>—Collector Dissipation.....400mW
- V<sub>CBO</sub>—Collector-Base Voltage.....-60V
- V<sub>CEO</sub>—Collector-Emitter Voltage.....-50V
- V<sub>EBO</sub>—Emitter-Base Voltage.....-6V
- I<sub>C</sub>—Collector Current.....-150mA



ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Characteristics	Min	Typ	Max	Unit	Test Conditions
BVCBO	Collector-Base Breakdown Voltage	-60			V	I <sub>C</sub> =-50 μ A, I <sub>E</sub> =0
BVCEO	Collector-Emitter Breakdown Voltage	-50			V	I <sub>C</sub> =-1mA, I <sub>B</sub> =0
BVEBO	Emitter-Base Breakdown Voltage	-6			V	I <sub>E</sub> =-50 μ A, I <sub>C</sub> =0
HFE	DC Current Gain	120		560		V <sub>CE</sub> =-6V, I <sub>C</sub> =-1mA
VCE(sat)	Collector- Emitter Saturation Voltage			-0.5	V	I <sub>C</sub> =-50mA, I <sub>B</sub> =-5mA
ICBO	Collector Cut-off Current			-100	nA	V <sub>CB</sub> =-60V, I <sub>E</sub> =0
IEBO	Emitter Cut-off Current			-100	nA	V <sub>EB</sub> =-6V, I <sub>C</sub> =0
f <sub>T</sub>	Current Gain-Bandwidth Product		140		MHz	V <sub>CE</sub> =-12V, I <sub>C</sub> =-2mA, f=30MHz
Cob	Output Capacitance		4.0	5.0	pF	V <sub>CB</sub> =-12V, I <sub>E</sub> =0, f=1MHz

hFE Classification

Q	R	K
120—270	180—390	270—560

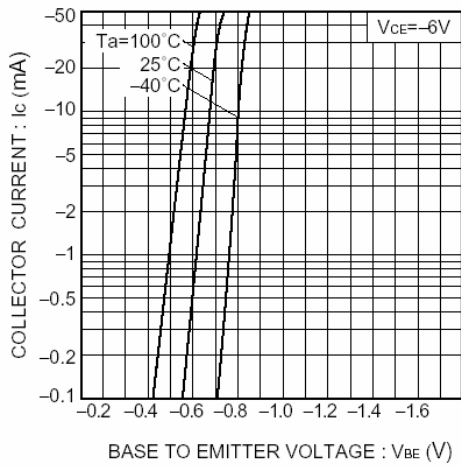


Fig.1 Grounded emitter propagation characteristics

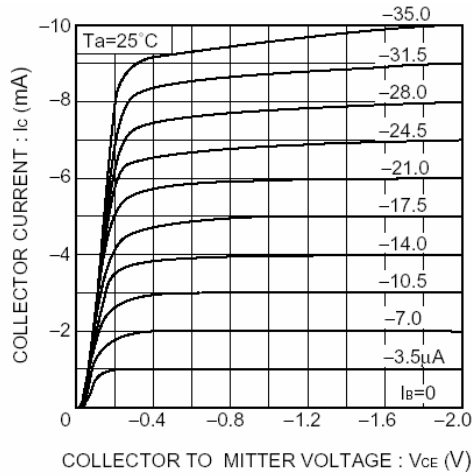


Fig.2 Grounded emitter output characteristics (I)

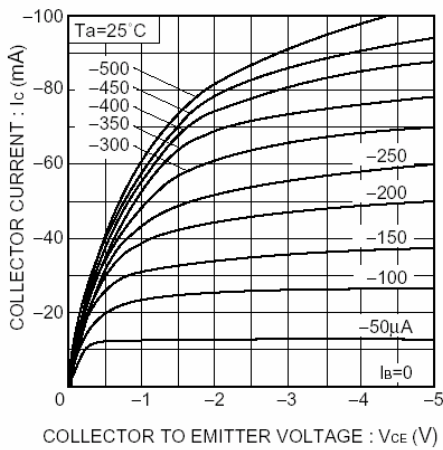


Fig.3 Grounded emitter output characteristics (II)

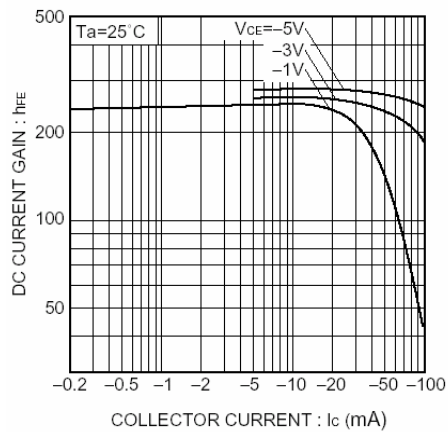


Fig.4 DC current gain vs. collector current (I)

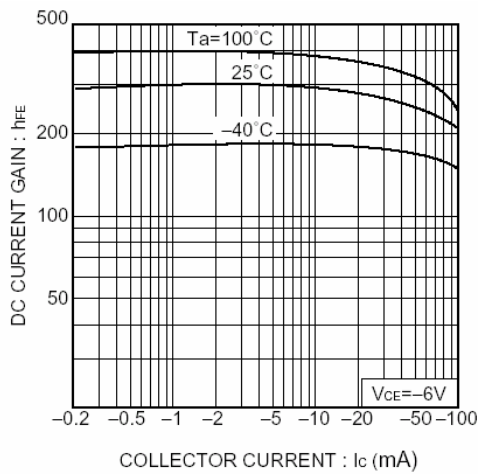


Fig.5 DC current gain vs. collector current (II)

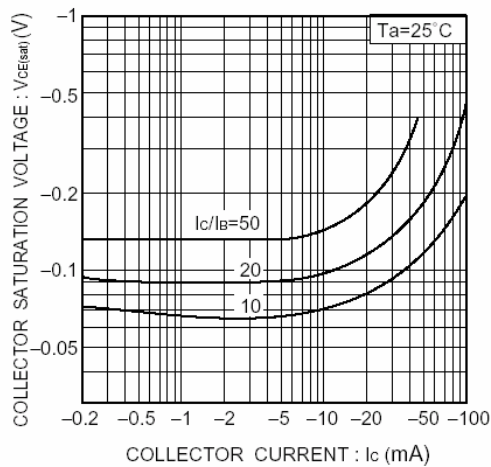


Fig.6 Collector-emitter saturation voltage vs. collector current (I)

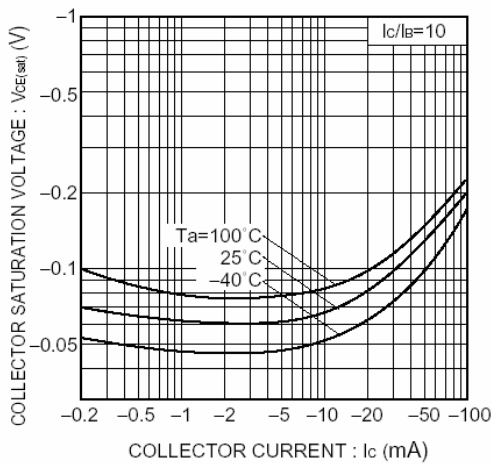


Fig.7 Collector-emitter saturation voltage vs. collector current (II)

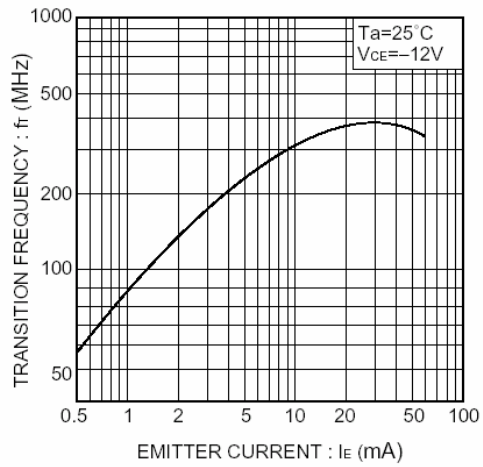


Fig.8 Gain bandwidth product vs. emitter current

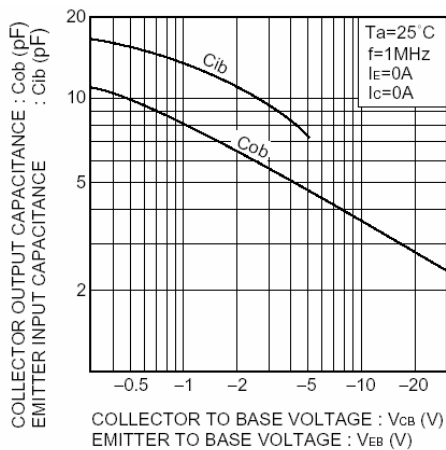


Fig.9 Collector output capacitance vs. collector-base voltage  
Emitter input capacitance vs. emitter-base voltage