



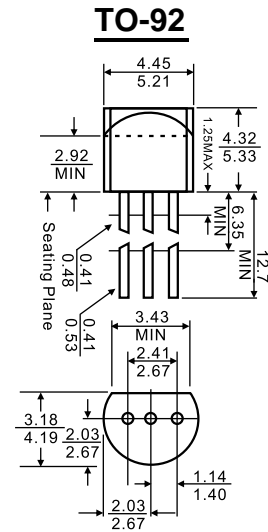
1. EMITTER
2. BASE
3. COLLECTOR

Features

- ✧ Switching and amplification in high voltage
- ✧ Applications such as telephony
- ✧ Low current(max. 600mA)
- ✧ High voltage(max.160V)

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

Symbol	Parameter	Value	Units
V _{CB0}	Collector-Base Voltage	160	V
V _{CEO}	Collector-Emitter Voltage	140	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current -Continuous	0.6	A
P _C	Collector Power Dissipation	0.625	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C



Dimensions in inches and (millimeters)

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100 μ A, I _E =0	160			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	140			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10 μ A, I _C =0	6			V
Collector cut-off current	I _{CBO}	V _{CB} =100V, I _E =0			0.1	μ A
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0			0.05	μ A
DC current gain	h _{FE(1)}	V _{CE} =5V, I _C =1mA	60			
	h _{FE(2)}	V _{CE} =5V, I _C =10mA	60		250	
	h _{FE(3)}	V _{CE} =5V, I _C =50mA	20			
Collector-emitter saturation voltage	V _{CEsat}	I _C = 10mA, I _B =1mA I _C = 50mA, I _B =5mA			0.15 0.25	V
Base-emitter saturation voltage	V _{BEsat}	I _C = 10mA, I _B =1mA I _C = 50mA, I _B =5 mA			1 1.2	V
Transition frequency	f _T	V _{CE} =10V, I _C =10mA, f=100MHz	100		300	MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz			6	pF
Noise figure	NF	V _{CE} =5V, I _C =0.25mA, f=1KHZ, R _S =1kΩ			10	dB

Typical Characteristics

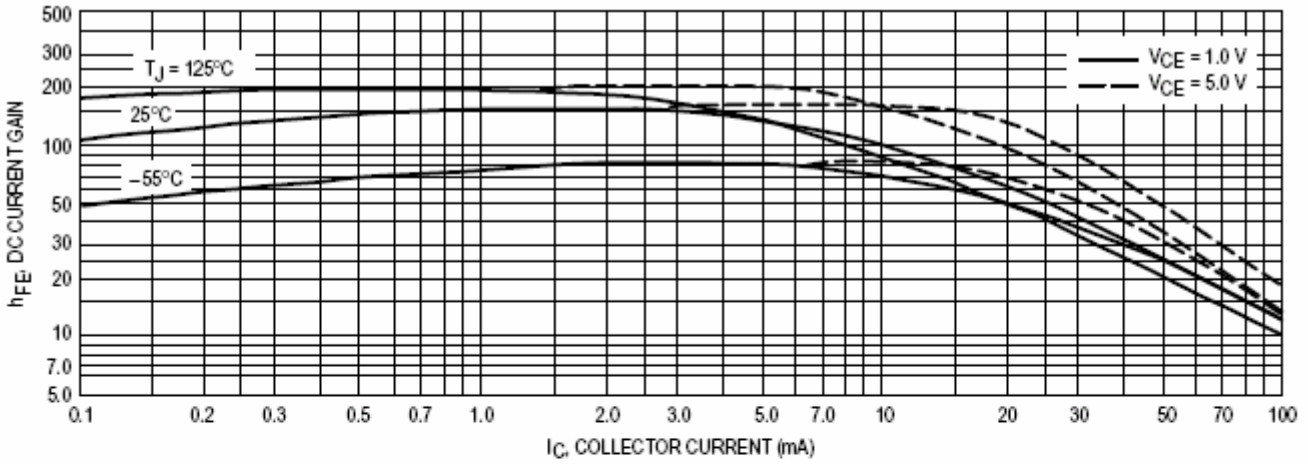
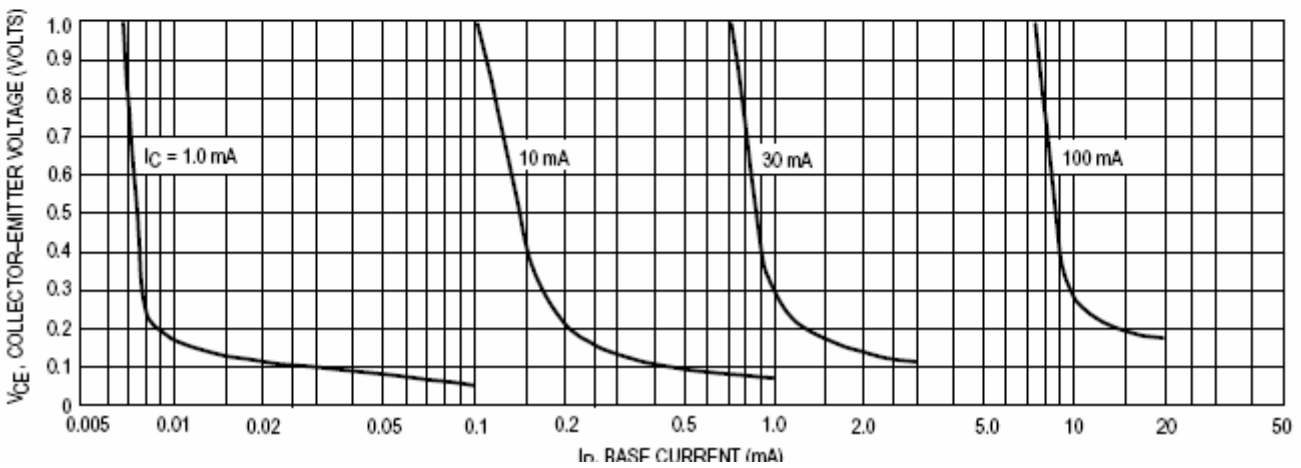


Figure 1. DC Current Gain



Package	Packing	Quantity	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	Bulk	1000pcs/BP	10,000pcs	245×170×100	100,000pcs	525×375×270
TO-92	Tape	2000pcs/TP	2000pcs	333×162×43	20,000pcs	350×340×250