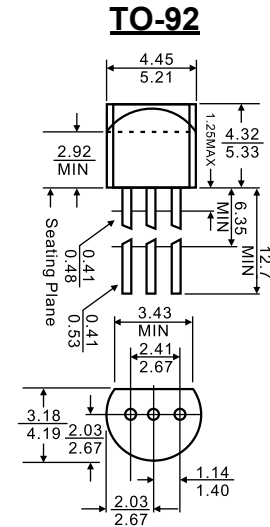




1. EMITTER
2. COLLECTOR
3. BASE



Dimensions in inches and (millimeters)

Features

- ◇ High current transistors

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

Symbol	Parameter	Value	Units
V _{CB0}	Collector-Emitter Voltage	BC635	45
		BC637	60
		BC639	100
V _{CEO}	Collector-Emitter Voltage	BC635	45
		BC637	60
		BC639	80
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	1	A
P _C	Collector Power Dissipation	0.625	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-65-150	°C

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =10mA, I _B =0 BC635	45			V
		BC637	60			V
		BC639	80			V
Collector cut-off current	I _{CB0}	V _{CB} = 30 V, I _E =0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _B =0			0.1	μA
DC current gain	h _{FE(1)}	V _{CE} =2 V, I _C = 5mA	25			
	h _{FE(2)}	V _{CE} =2V, I _C =150mA BC635	40		250	
		BC637-10/BC639-10	63		160	
		BC637-16/BC639-16	100		250	
h _{FE(3)}	V _{CE} =2V, I _C = 500mA	25				
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =500mA, I _B =50mA			0.5	V
Base-emitter voltage	V _{BE}	V _{CE} =2V, I _C =500mA			1	V
Transition frequency	f _T	V _{CE} =5V, I _C =10mA, f= 50 MHz		100		MHz



Typical Characteristics

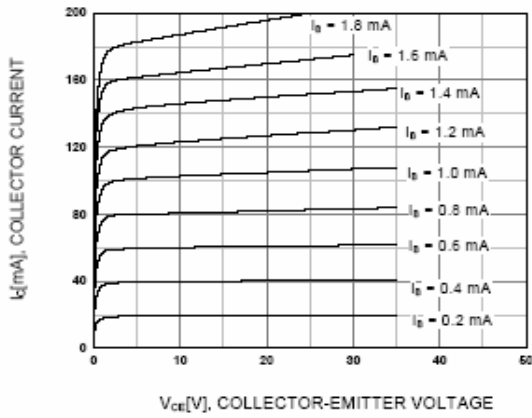


Figure 1. Static Characteristic

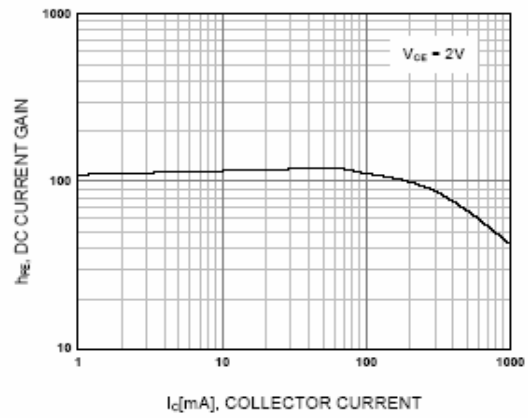


Figure 2. DC current Gain

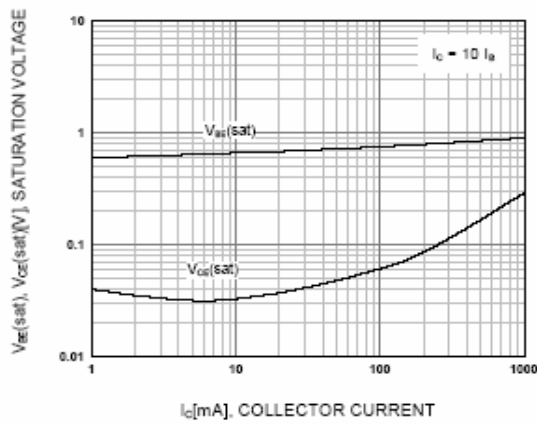


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

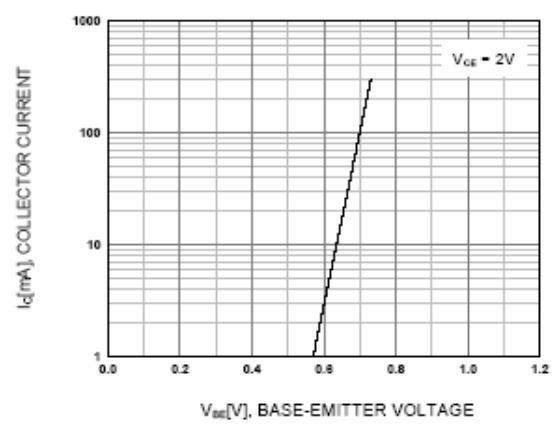


Figure 4. Base-Emitter On Voltage

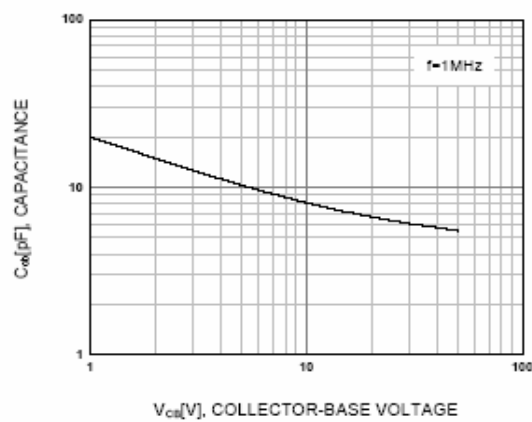


Figure 5. Collector Output Capacitance

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