



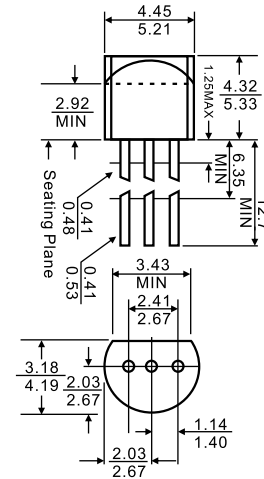
1. EMITTER
2. COLLECTOR
3. BASE

TO-92
Features

- ✧ High current transistors

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

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	BC636 -45	V
		BC638 -60	
		BC640 -100	
V_{CEO}	Collector-Emitter Voltage	BC636 -45	V
		BC638 -60	
		BC640 -80	
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-1	A
P_C	Collector Power Dissipation	0.83	W
R_{θJA}	Thermal Resistance, junction to Ambient	150	°C/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)

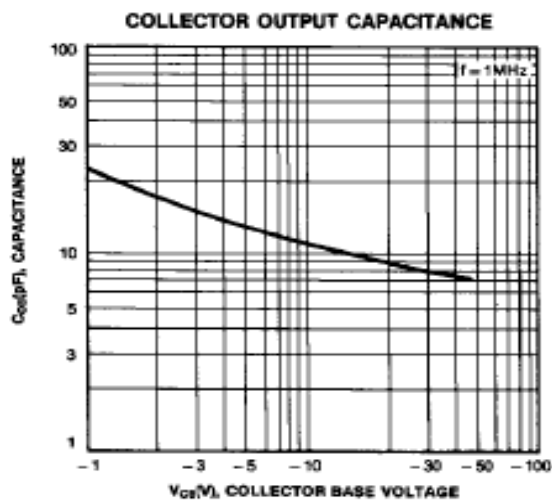
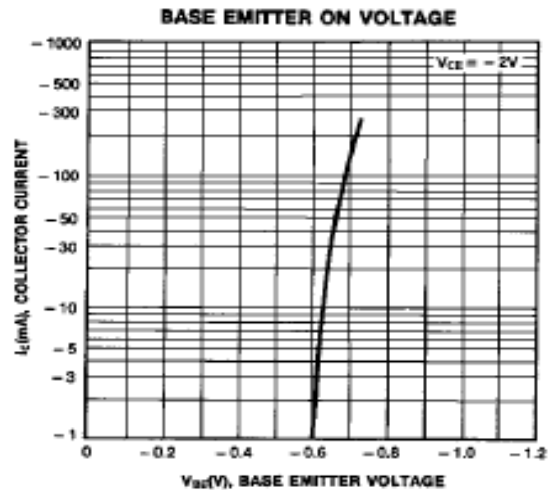
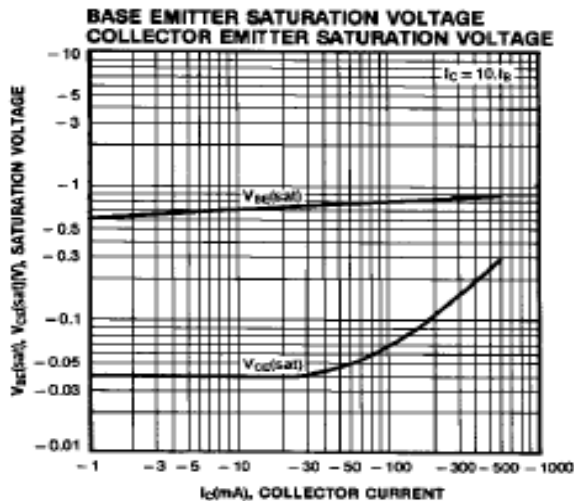
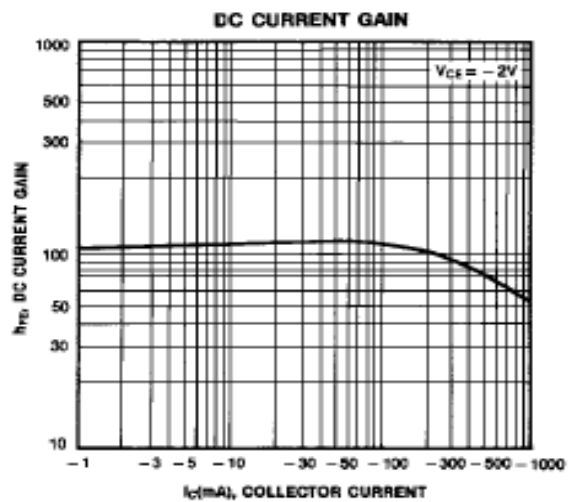
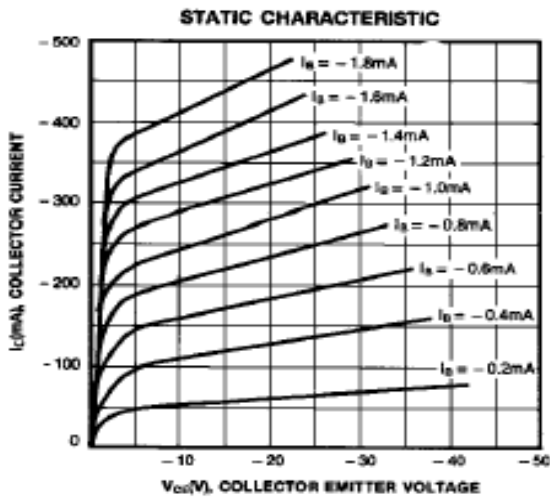
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100μA, I _E =0	BC636 -45			V
			BC638 -60			
			BC640 -100			
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-1mA, I _B =0	BC636 -45			V
			BC638 -60			
			BC640 -80			
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-100μA, I _C =0	-5			V
Collector cut-off current	I _{CB0}	V _{CB} =-30V, I _E =0			-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -5V, I _C =0			- 0.1	μA
DC current gain	h _{FE(1)}	V _{CE} = -2V, I _C =- 5mA	40			
	h _{FE(2)}	V _{CE} = -2V, I _C =- 150mA	63		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 =- 50mA, f=100MHZ	100			MHZ

CLASSIFICATION OF h_{FE(2)}

Rank	BC636-10	BC636-16, BC638-16, BC640-16
Range	63-160	100-250



Typical Characteristics



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