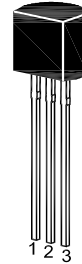


BC636...BC640

PNP Silicon Epitaxial Planar Transistor

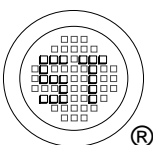
Medium Power Transistors
for audio and video amplifiers



1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	BC636	45	V
	BC638	60	
	BC640	100	
Collector Emitter Voltage	BC636	45	V
	BC638	60	
	BC640	80	
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	1	A
Peak Collector Current	$-I_{CM}$	1.5	A
Base Current	$-I_B$	100	mA
Peak Base Current	$-I_{BM}$	200	mA
Power Dissipation	P_{tot}	830	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$



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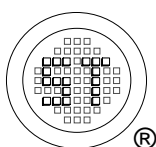


Dated : 19/10/2009 CL

BC636...BC640

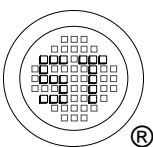
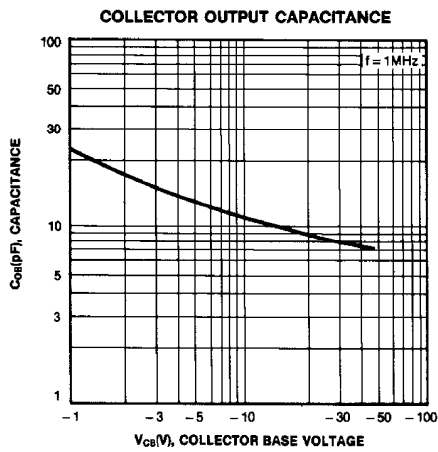
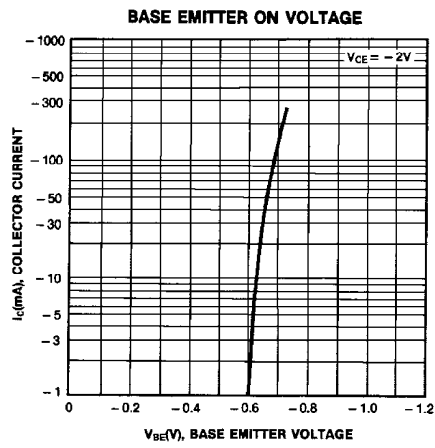
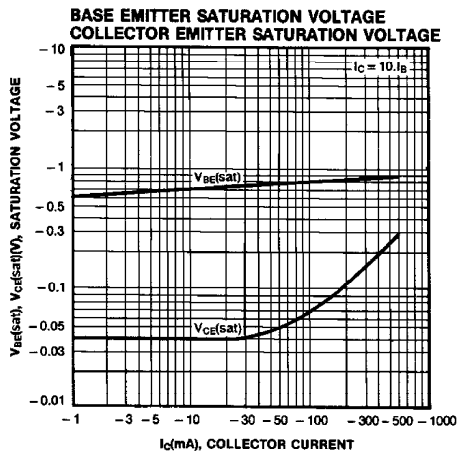
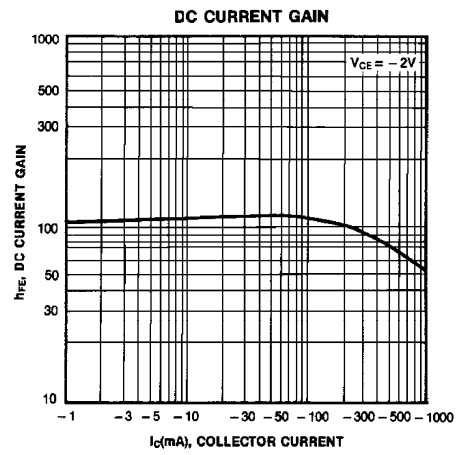
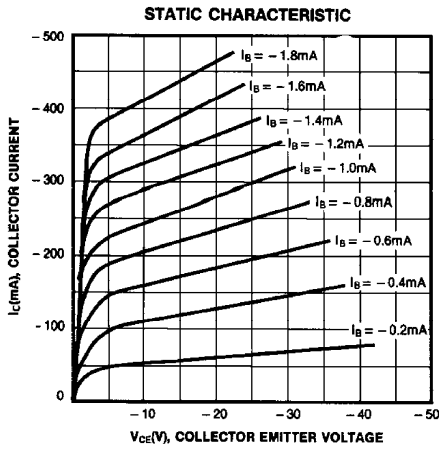
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE} = 2\text{ V}$, $-I_C = 5\text{ mA}$ at $-V_{CE} = 2\text{ V}$, $-I_C = 150\text{ mA}$ at $-V_{CE} = 2\text{ V}$, $-I_C = 500\text{ mA}$	Current Gain Group -10 -16	h_{FE}	40	-
		h_{FE}	63	160
		h_{FE}	100	250
		h_{FE}	25	-
Collector Base Cutoff Current at $-V_{CB} = 30\text{ V}$	$-I_{CBO}$	-	100	nA
Emitter Base Cutoff Current at $V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	100	nA
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	BC636	45	-
		BC638	60	-
		BC640	100	-
Collector Emitter Breakdown Voltage at $-I_C = 10\text{ mA}$	$-V_{(BR)CEO}$	BC636	45	-
		BC638	60	-
		BC640	80	-
Emitter Base Breakdown Voltage at $-I_E = 10\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage at $-I_C = 500\text{ mA}$, $-I_B = 50\text{ mA}$	$-V_{CE(sat)}$	-	0.5	V
Base Emitter Voltage at $-V_{CE} = 2\text{ V}$, $-I_C = 500\text{ mA}$	$-V_{BE}$	-	1	V
Gain Bandwidth Product at $-V_{CE} = 5\text{ V}$, $-I_C = 50\text{ mA}$, $f = 100\text{ MHz}$	f_T	100	-	MHz



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