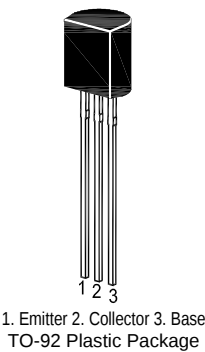


BC635...BC639

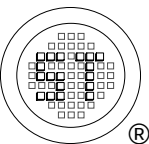
NPN Silicon Epitaxial Planar Transistor

Medium Power Transistors
for driver stages of audio / video amplifiers



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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	BC635 45	V
		BC637 60	
		BC639 100	
Collector Emitter Voltage	V_{CEO}	BC635 45	V
		BC637 60	
		BC639 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}	- 55 to + 150	$^{\circ}\text{C}$



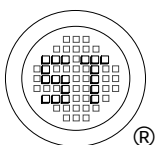
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BC635...BC639

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

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 $V_{CE} = 2\text{ V}$, $I_C = 500\text{ mA}$	h_{FE} h_{FE} h_{FE} h_{FE}	40 40 40 25	- 250 160 -	- - - -
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 $I_C = 100\text{ }\mu\text{A}$	$V_{(BR)CBO}$	45 60 100	- - -	V
Collector Emitter Breakdown Voltage at $I_C = 10\text{ mA}$	$V_{(BR)CEO}$	45 60 80	- - -	V
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

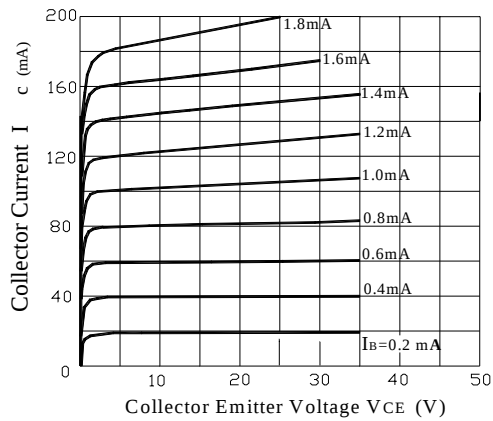


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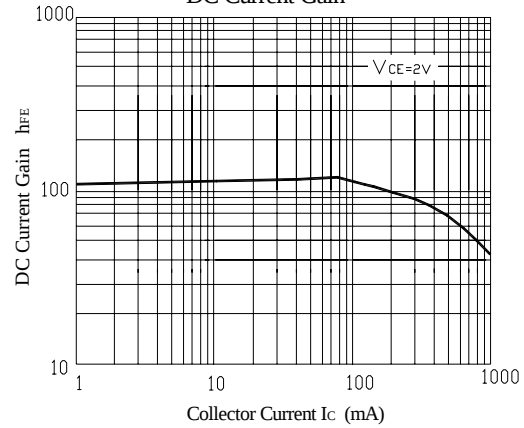


Dated: 11/02/2012 Rev: 01

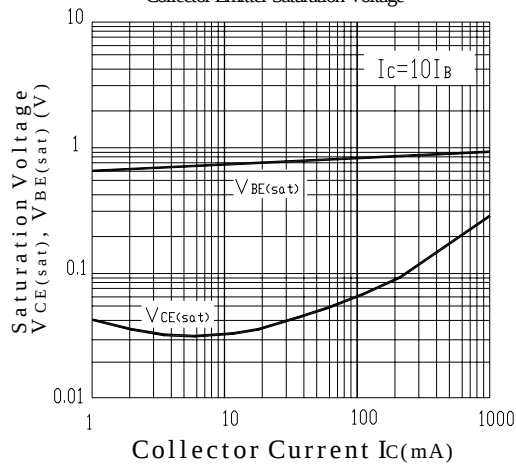
Static Characteristics



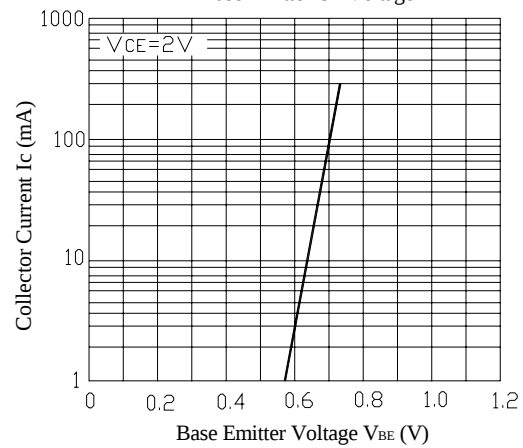
DC Current Gain



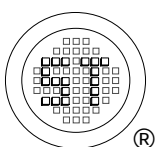
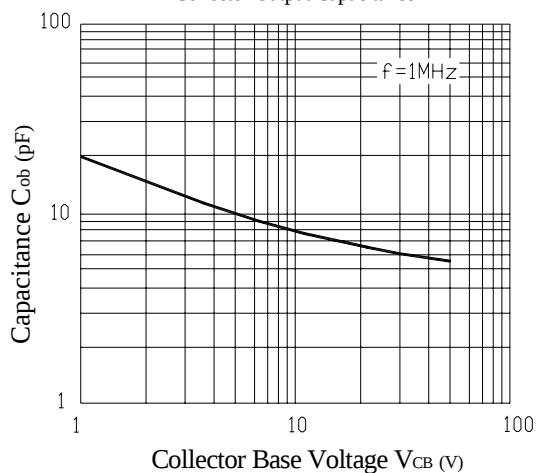
Base Emitter Saturation Voltage
Collector Emitter Saturation Voltage



Base Emitter On Voltage



Collector Output Capacitance



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