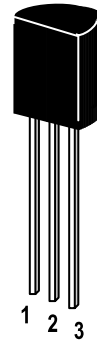


ST BC635 / BC637 / BC639

NPN Silicon Epitaxial Planar Transistor

Medium Power Transistors

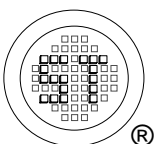
for driver stages of audio / video amplifiers



1. Emitter 2. Collector 3. Base
TO-92 Plastic Package
Weight approx. 0.19g

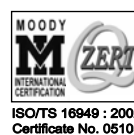
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

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



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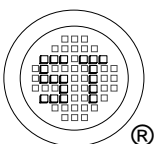


Dated : 15/03/2007

ST BC635 / BC637 / BC639

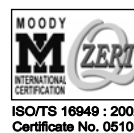
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

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 $V_{CE} = 2\text{ V}$, $I_C = 500\text{ mA}$	h_{FE}	40	-	-
	h_{FE}	40	250	-
	h_{FE}	40	160	-
	h_{FE}	25	-	-
Collector Cutoff Current at $V_{CB} = 30\text{ V}$	I_{CBO}	-	100	nA
Emitter 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

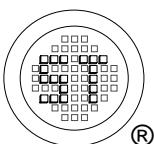
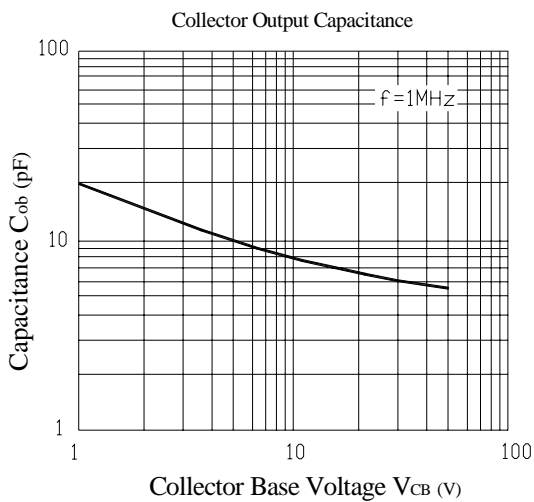
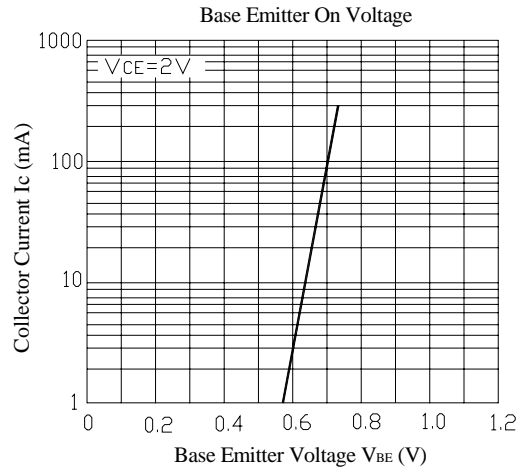
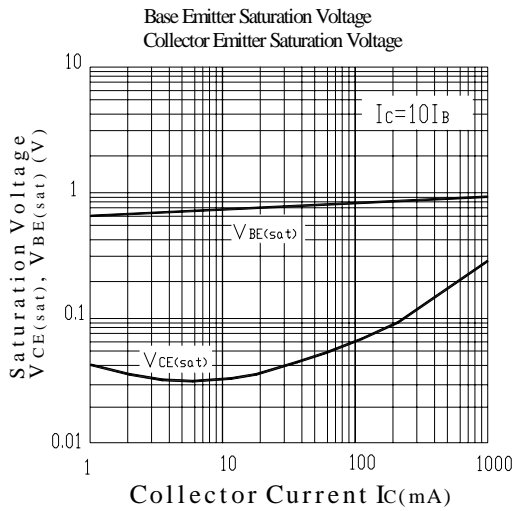
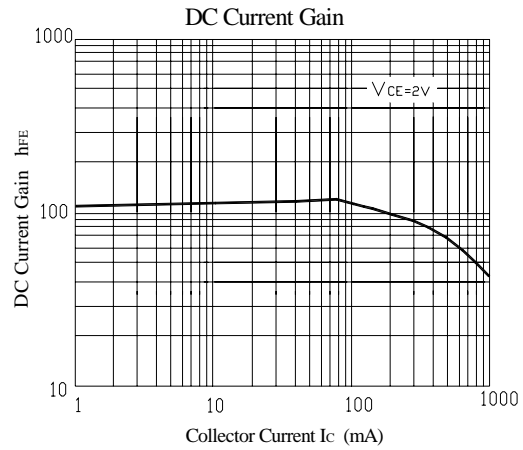
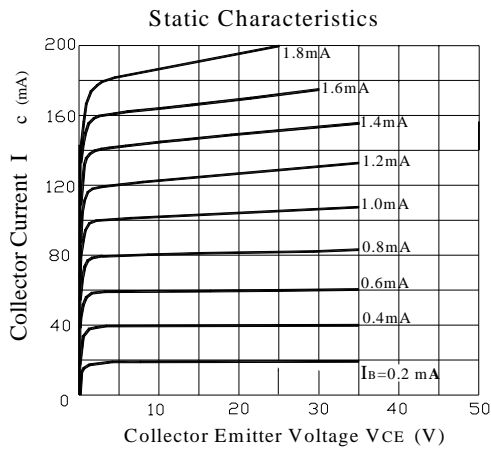


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