



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

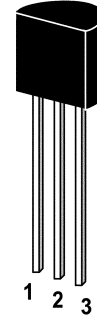
TEL: 852-2790 0314 FAX: 852-2790 0206

ST BC635 / BC637 / BC639

NPN Silicon Epitaxial Planar Transistor

Switching and amplifier application

On special request, these transistors can be manufactured in different pin configurations.



1. Emitter 2. Collector 3. Base

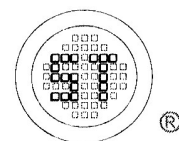
TO-92 Plastic Package

Weight approx. 0.19g

Absolute Maximum Ratings (T_a = 25 °C)

	Symbol	Value	Unit	
Collector Emitter Voltage	ST BC635	V _{CER}	45	V
At R _{BE} =1KΩ	ST BC637	V _{CER}	60	V
	ST BC639	V _{CER}	100	V
Collector Emitter Voltage	ST BC635	V _{CES}	45	V
	ST BC637	V _{CES}	60	V
	ST BC639	V _{CES}	100	V
Collector Emitter Voltage	ST BC635	V _{CEO}	45	V
	ST BC637	V _{CEO}	60	V
	ST BC639	V _{CEO}	80	V
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
Power Dissipation		P _{tot}	1	W
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _s	-65 to +150	°C

PW=5ms,Duty Cycle =10%



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Dated : 07/12/2002



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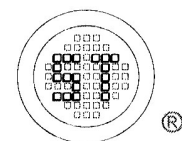
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Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain.					
at $V_{CE}=2V, I_C=5mA$	h_{FE}	25	-	-	
at $V_{CE}=2V, I_C=150mA$	h_{FE}	40	250	-	
BC635	h_{FE}	40	160	-	
BC637/BC639	h_{FE}	25	-	-	
at $V_{CE}=2V, I_C=500mA$	h_{FE}				
Collector Emitter Breakdown Voltage					
At $I_C=10mA$					
ST BC635	$V_{(BR)CEO}$	45	-	-	V
ST BC637	$V_{(BR)CEO}$	60	-	-	V
ST BC639	$V_{(BR)CEO}$	80	-	-	V
Collector Saturation Voltage					
at $I_C=500mA, I_B=50mA$	V_{CEsat}	-	-	0.5	V
Collector Cutoff Current					
at $V_{CB}=30V$	I_{CBO}	-	-	0.1	μA
Emitter Cutoff Current					
at $V_{EB} = 5V$	I_{EBO}	-	-	0.1	μA
Base Emitter On Voltage					
at $V_{CE}=2V, I_C=500mA$	$V_{BE(on)}$	-	-	1	V
Transition Frequency					
$V_{CE}=5V, I_C=10mA, F=50MHz$	f_T	-	100	-	MHz



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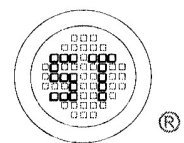
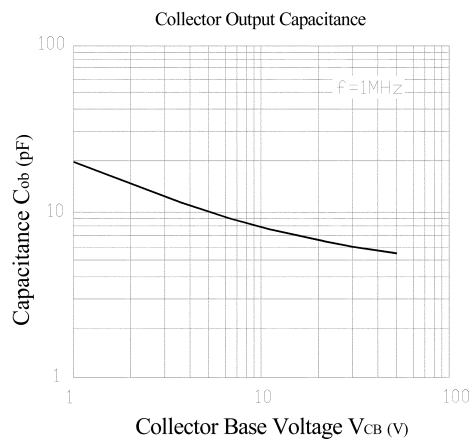
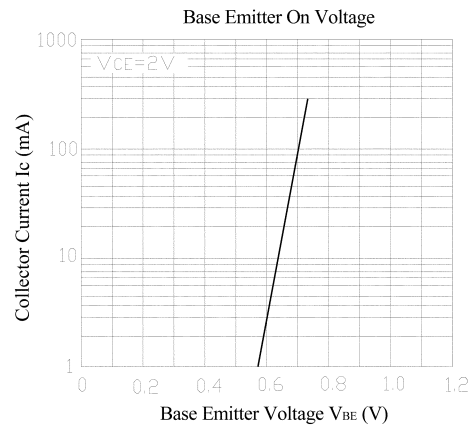
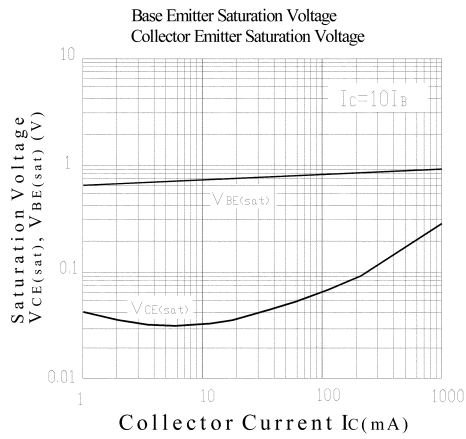
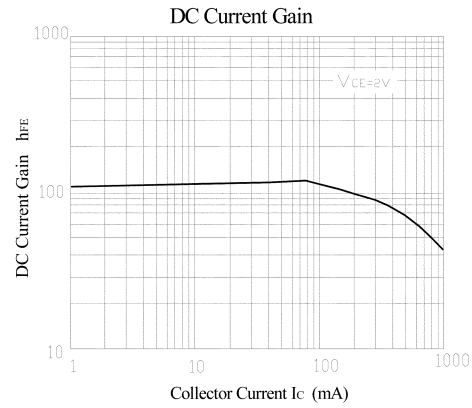
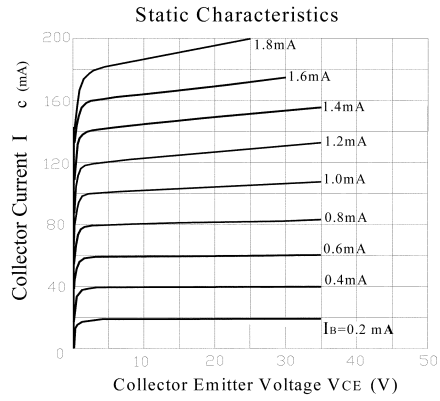
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