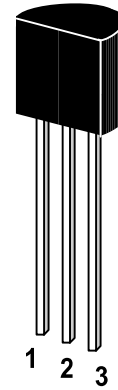


ST BC635 / BC637 / BC639

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

		Symbol	Value	Unit
Collector Emitter Voltage At $R_{BE}=1K\Omega$	ST BC635	V_{CER}	45	V
	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	$^\circ\text{C}$
Storage Temperature Range		T_s	-65 to +150	$^\circ\text{C}$

PW=5ms,Duty Cycle =10%

G S P FORM A IS AVAILABLE

ST BC635 / BC637 / BC639

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 $V_{CE}=2V$, $I_C=150mA$ BC635	h_{FE}	40	250	-	
BC637/BC639	h_{FE}	40	160	-	
at $V_{CE}=2V$, $I_C=500mA$	h_{FE}	25	-	-	
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

G S P FORM A IS AVAILABLE

ST BC635 / BC637 / BC639

