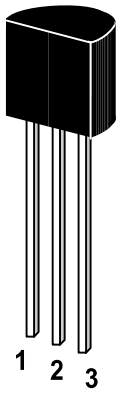
ST BC337… BC338

NPN Silicon Epitaxial Planar Transistor
for switching and amplifier applications. Especially suitable for AF-driver stages and low-power output stages.

These types are also available subdivided into three groups -16, -25 and -40,according to their DC current gain. As complementary types, the PNP transistors BC327 and BC328 are recommended.

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



1. Collector 2. Base 3. Emitter

TO-92 Plastic Package
Weight approx. 0.19g

Absolute Maximum Ratings (T_a = 25 ^{O}C)

		Symbol	Value	Unit
Collector Base Voltage	ST BC337	V_{CBO}	50	V
	ST BC338	V_{CBO}	30	V
Collector Emitter Voltage	ST BC337	V_{CEO}	45	V
	ST BC338	V_{CEO}	25	V
Emitter Base Voltage		V_{EBO}	5	V
Collector Current		I_C	800	mA
Peak Collector Current		I_{CM}	1	A
Base Current		I_B	100	mA
Power Dissipation		P_{tot}	625[1)]	mW
Junction Temperature		T_j	150	^{O}C
Storage Temperature Range		T_S	-65 to +150	^{O}C

[1)] Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case

G S P FORM A IS AVAILABLE

Characteristics at T_{amb}=25 °C

		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain						
at V_{CE}=1V, I_C=100mA						
Current Gain Group	-16	h_{FE}	100	160	250	-
	-25	h_{FE}	160	250	400	-
	-40	h_{FE}	250	400	630	-
at V_{CE}=1V, I_C=300mA						
Current Gain Group	-16	h_{FE}	60	130	-	-
	-25	h_{FE}	100	200	-	-
	-40	h_{FE}	170	320	-	-
Collector Base Cutoff Current						
at V_{CB}=50V	ST BC337	I_{CBO}	-	2	100	nA
at V_{CB}=30V	ST BC338	I_{CBO}	-	2	100	nA
at V_{CB}=50V, T_{amb}=125 °C	ST BC337	I_{CBO}	-	-	10	µA
at V_{CB}=30V, T_{amb}=125 °C	ST BC338	I_{CBO}	-	-	10	µA
Collector Emitter Breakdown Voltage						
at I_C=10mA	ST BC337	$V_{(BR)CEO}$	45	-	-	V
	ST BC338	$V_{(BR)CEO}$	25	-	-	V
Collector Base Breakdown Voltage						
at I_C=0.1mA	ST BC337	$V_{(BR)CBO}$	50	-	-	V
	ST BC338	$V_{(BR)CBO}$	30	-	-	V
Emitter Base Breakdown Voltage						
at I_E=0.1mA		$V_{(BR)EBO}$	5	-	-	V
Collector Saturation Voltage						
at I_C=500mA, I_B=50mA		V_{CEsat}	-	-	0.7	V
Base Emitter Voltage						
at V_{CE}=1V, I_C=300mA		V_{BE}	-	-	1.2	V
Gain Bandwidth Product						
at V_{CE}=5V, I_C=10mA, f=50MHz		f_T	-	100	-	MHz
Collector Base Capacitance						
at V_{CB}=10V, f=1MHz		C_{CBO}	-	12	-	pF
Thermal Resistance Junction to Ambient Air		R_{thA}	-	-	200[1)]	K/W

[1)] Valid provided that leads are kept at ambient temperature at a distance of 2 mm from case

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