2SC536 NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into four groups, O, Y, G and L, according to its DC current gain.

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℃)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	40	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA
Base Current	I_B	50	mA
Power Dissipation	P_{tot}	400	mW
Junction Temperature	T_j	125	^OC
Storage Temperature Range	T_S	-55 to +125	^OC

Characteristics at T_{amb}=25 °C

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at V_{CE}=6V, I_C=1mA					
Current Gain Group O	h_{FE}	70	-	140	-
Y	h_{FE}	120	-	240	-
G	h_{FE}	200	-	400	-
L	h_{FE}	350	-	700	-
at V_{CE}=6V, I_C=150mA	h_{FE}	25	100	-	-
Collector Emitter Saturation Voltage					
at I_C=50mA, I_B=5mA	$V_{CE(sat)}$	-	-	0.5	V
Base Emitter Saturation Voltage					
at I_C=50mA, I_B=5mA	$V_{BE(sat)}$	-	-	1.2	V
Collector Cutoff Current					
at V_{CB}=35V	I_{CBO}	-	-	0.1	μA
Emitter Cutoff Current					
at V_{EB}=5V	I_{EBO}	-	-	0.1	μA
Transition Frequency					
at V_{CE}=10V, I_E=1mA	f_T	100	-	-	MHz
Collector Output Capacitance					
at V_{CB}=10V, f=1MHz	C_{OB}	-	2	3.5	pF
Base Intrinsic Resistance					
at V_{CB}=10V I_C=1mA, f=30MHz	Rbb’	-	50	-	Ω
Noise Figure					
at V_{CE}=6V, I_C=0.1Ma					
f=1KHz, R_G=10KΩ	NF	-	1	10	dB