ST 2SC3198

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

	Symbol	Value	Unit
Collector Base Voltage	V _{CBO}	60	V
Collector Emitter Voltage	V _{CEO}	50	V
Emitter Base Voltage	V _{EBO}	5	V
Collector Current	I _C	150	mA
Base Current	I _B	50	mA
Power Dissipation	P _{tot}	500	mW
Junction Temperature	Tj	125	°C
Storage Temperature Range	Ts	-55 to +125	°C







Dated : 07/12/2002

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Characteristics at T_{amb} =25 ^{o}C

	Symbol	Min.	Тур.	Max.	Unit
DC Current Gain					
at V _{CE} =6V, I _C =2mA					
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 =100mA, I _B =10mA	$V_{\text{CE(sat)}}$	-	0.1	0.25	V
Base Emitter Saturation Voltage					
at I _C =100mA, I _B =10mA	$V_{BE(sat)}$	-	-	1	V
Collector Cutoff Current					
at V _{CB} =60V	I _{CBO}	-	-	0.1	μΑ
Emitter Cutoff Current					
at V _{EB} =5V	I _{EBO}	-	-	0.1	μΑ
Transition Frequency					
at V _{CE} =10V, I _E =1mA	f _T	80	-	-	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 =10K Ω	NF	-	1	10	dB







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