

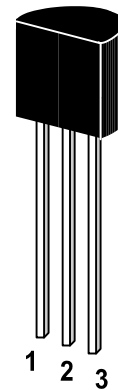
ST 2SC3198

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.



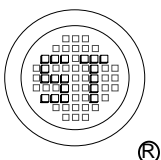
1. Emitter 2. Collector 3. Base

TO-92 Plastic Package
Weight approx. 0.19g

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

	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	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_S	-55 to +125	$^\circ\text{C}$

G S P FORM A IS AVAILABLE



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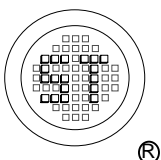
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Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=6\text{V}$, $I_C=2\text{mA}$ Current Gain Group at $V_{CE}=6\text{V}$, $I_C=150\text{mA}$	O	70	-	140	-
	Y	120	-	240	-
	G	200	-	400	-
	L	350	-	700	-
		h_{FE}	25	100	-
Collector Emitter Saturation Voltage at $I_C=100\text{mA}$, $I_B=10\text{mA}$	$V_{CE(sat)}$	-	0.1	0.25	V
Base Emitter Saturation Voltage at $I_C=100\text{mA}$, $I_B=10\text{mA}$	$V_{BE(sat)}$	-	-	1	V
Collector Cutoff Current at $V_{CB}=60\text{V}$	I_{CBO}	-	-	0.1	μA
Emitter Cutoff Current at $V_{EB}=5\text{V}$	I_{EBO}	-	-	0.1	μA
Transition Frequency at $V_{CE}=10\text{V}$, $I_E=1\text{mA}$	f_T	80	-	-	MHz
Collector Output Capacitance at $V_{CB}=10\text{V}$, $f=1\text{MHz}$	C_{OB}	-	2	3.5	pF
Base Intrinsic Resistance at $V_{CB}=10\text{V}$, $I_C=1\text{mA}$, $f=30\text{MHz}$	$R_{bb'}$	-	50	-	Ω
Noise Figure at $V_{CE}=6\text{V}$, $I_C=0.1\text{Ma}$ $f=1\text{KHz}$, $R_G=10\text{K}\Omega$	NF	-	1	10	dB

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