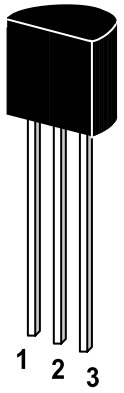
ST 2SA1015

PNP Silicon Epitaxial Planar Transistor
for switching and AF amplifier applications.

The transistor is subdivided into three groups, O, Y and G, L , according to its DC current gain. As complementary type the NPN transistor ST 2SC1815 is recommended.

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℃)

	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	50	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}	400	mW
Junction Temperature	T_j	125	^{O}C
Storage Temperature Range	T_S	-65 to +150	^{O}C

Characteristics at T_{amb}=25 °C

	Symbol	Min.	Typ.	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	-	-	-
Collector Base Breakdown Voltage at $-I_C$=100μA	$-V_{(BR)CBO}$	50	-	-	V
Collector Emitter Breakdown Voltage at $-I_C$=10mA	$-V_{(BR)CEO}$	50	-	-	V
Emitter Base Breakdown Voltage at $-I_E$=10μA	$-V_{(BR)EBO}$	5	-	-	V
Collector Cutoff Current at $-V_{CB}$=50V	$-I_{CBO}$	-	-	0.1	μA
Emitter Cutoff Current at $-V_{EB}$=5V	$-I_{EBO}$	-	-	0.1	μA
Collector Saturation Voltage at $-I_C$=100mA, $-I_B$=10mA	$-V_{CE(sat)}$	-	0.1	0.3	V
Base Saturation Voltage at $-I_C$=100mA, $-I_B$=10mA	$-V_{BE(sat)}$	-	-	1.1	V
Gain Bandwidth Product at $-V_{CE}$=10V, $-I_C$=1mA	f_T	80	-	-	MHz
Output Capacitance at $-V_{CB}$=10V, f=1MHz	C_{OB}	-	4	7	pF
Noise Figure at $-V_{CE}$=6V, $-I_C$=0.1mA f=100Hz, R_S=10KΩ	NF	-	0.5	6	dB