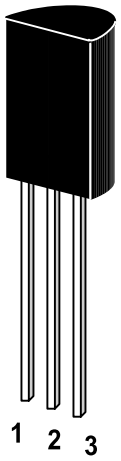
ST 2SA1013

PNP Silicon Epitaxial Planar Transistor

The transistor is subdivided into three groups, R, O and Y, 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-92L Plastic Package
Weight approx. 0.38g

Absolute Maximum Ratings (T_a = 25 °C)

	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	160	V
Collector Emitter Voltage	$-V_{CEO}$	160	V
Emitter Base Voltage	$-V_{EBO}$	6	V
Collector Current	$-I_C$	1	A
Base Current	$-I_B$	0.5	A
Power Dissipation	P_{tot}	900	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_S	-55 to +150	°C

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Characteristics at T_a=25 °C

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at $-V_{CE}$=5V, $-I_C$=200mA					
Current Gain Group R	h_{FE}	60	-	120	-
O	h_{FE}	100	-	200	-
Y	h_{FE}	160	-	320	-
Collector Cutoff Current					
at $-V_{CB}$=150V	$-I_{CBO}$	-	-	1	μA
Emitter Cutoff Current					
at $-V_{EB}$=6V	$-I_{EBO}$	-	-	1	μA
Collector Emitter Breakdown Voltage					
at $-I_C$=10mA	$-BV_{CEO}$	160	-	-	V
Collector Emitter Saturation Voltage					
at $-I_C$=500mA, $-I_B$=50mA	$-V_{CE(sat)}$	-	-	1.5	V
Base Emitter On Voltage					
at $-I_C$=5mA, $-V_{CE}$=5V	$-V_{BE(on)}$	0.45	-	0.75	V
Current Gain Bandwidth Product					
at $-V_{CE}$=5V, $-I_C$=200mA	f_T	15	50	-	MHz
Output Capacitance					
at $-V_{CB}$=10V, f=1MHz	C_{OB}	-	-	35	pF

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