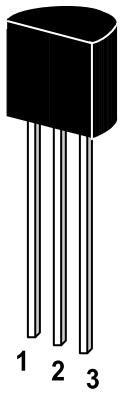
ST 2SA1016

PNP Silicon Epitaxial Planar Transistor
High -Voltage Low-Noise Amp applications

The transistor is subdivided into three groups F, G and H, according to its DC current gain.



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	$-V_{CBO}$	120	V
Collector Emitter Voltage	$-V_{CEO}$	100	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	50	mA
Collector Current (Pulse)	$-I_{CP}$	100	mA
Collector Dissipation	P_{tot}	400	mW
Junction Temperature	T_j	125	^{O}C
Storage Temperature Range	T_S	-55 to +125	^{O}C

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

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at $-V_{CE}$=6V, $-I_C$=1mA					
Current Gain Group F	h_{FE}	160	-	320	-
G	h_{FE}	280	-	560	-
H	h_{FE}	480	-	960	-
Collector Base Breakdown Voltage					
at $-I_C$=10μA	$-V_{(BR)CBO}$	120	-	-	V
Collector Emitter Breakdown Voltage					
at $-I_C$=1mA	$-V_{(BR)CEO}$	100	-	-	V
Emitter Base Breakdown Voltage					
at $-I_E$=10μA	$-V_{(BR)EBO}$	5	-	-	V
Collector Cutoff Current					
at $-V_{CB}$=80V	$-I_{CBO}$	-	-	1	μA
Emitter Cutoff Current					
at $-V_{EB}$=4V	$-I_{EBO}$	-	-	1	μA
Collector Emitter Saturation Voltage					
at $-I_C$=10mA, $-I_B$=1mA	$-V_{CE(sat)}$	-	-	0.5	V
Gain Bandwidth Product					
at $-V_{CE}$=6V, $-I_C$=1mA	f_T	-	110	-	MHz
Output Capacitance					
at $-V_{CB}$=10V, f=1MHz	C_{OB}	-	2.2	-	pF
Noise Level					
at V_{CC}=30V, I_C=1mA					
R_g=56KΩ,V_G=77dB/1kHz	$C_{NO(ave)}$	-	-	35	mV
Noise Peak Level					
at V_{CC}=30V, I_C=1mA					
R_g=56KΩ,V_G=77dB/1kHz	$C_{NO(peak)}$	-	-	200	mV