

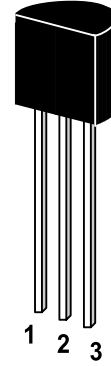
ST 2SA1015

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.

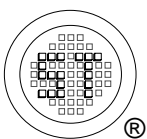


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package
Weight approx. 0.19g

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

	Symbol	Value	Unit
Collector Base Voltage	$-V_{\text{CBO}}$	50	V
Collector Emitter Voltage	$-V_{\text{CEO}}$	50	V
Emitter Base Voltage	$-V_{\text{EBO}}$	5	V
Collector Current	$-I_{\text{C}}$	150	mA
Base Current	$-I_{\text{B}}$	50	mA
Power Dissipation	P_{tot}	400	mW
Junction Temperature	T_{j}	125	$^\circ\text{C}$
Storage Temperature Range	T_{S}	-65 to +150	$^\circ\text{C}$



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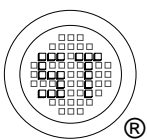


Dated : 07/12/2002

ST 2SA1015

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 O	h_{FE}	70	-	140	-
Y	h_{FE}	120	-	240	-
G	h_{FE}	200	-	400	-
L	h_{FE}	350	-	700	-
at $-V_{CE}=6\text{V}$, $-I_C=150\text{mA}$	h_{FE}	25	-	-	-
Collector Base Breakdown Voltage at $-I_C=100\mu\text{A}$	$-V_{(BR)CBO}$	50	-	-	V
Collector Emitter Breakdown Voltage at $-I_C=10\text{mA}$	$-V_{(BR)CEO}$	50	-	-	V
Emitter Base Breakdown Voltage at $-I_E=10\mu\text{A}$	$-V_{(BR)EBO}$	5	-	-	V
Collector Cutoff Current at $-V_{CB}=50\text{V}$	$-I_{CBO}$	-	-	0.1	μA
Emitter Cutoff Current at $-V_{EB}=5\text{V}$	$-I_{EBO}$	-	-	0.1	μA
Collector Saturation Voltage at $-I_C=100\text{mA}$, $-I_B=10\text{mA}$	$-V_{CE(sat)}$	-	0.1	0.3	V
Base Saturation Voltage at $-I_C=100\text{mA}$, $-I_B=10\text{mA}$	$-V_{BE(sat)}$	-	-	1.1	V
Gain Bandwidth Product at $-V_{CE}=10\text{V}$, $-I_C=1\text{mA}$	f_T	80	-	-	MHz
Output Capacitance at $-V_{CB}=10\text{V}$, $f=1\text{MHz}$	C_{OB}	-	4	7	pF
Noise Figure at $-V_{CE}=6\text{V}$, $-I_C=0.1\text{mA}$ $f=100\text{Hz}$, $R_S=10\text{K}\Omega$	NF	-	0.5	6	dB



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ISO/TS 16949 : 2002 Certificate No. 05103
ISO 14001:2004 Certificate No. 7116
ISO 9001:2000 Certificate No. 0508098

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