

2SA1505 PNP Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into two groups, 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-92 Plastic Package
 Weight approx. 0.19g

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	35	V
Collector Emitter Voltage	$-V_{CEO}$	30	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	500	mA
Base Current	$-I_B$	50	mA
Power Dissipation	P_{tot}	150	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}=1\text{V}$, $-I_C=100\text{mA}$					
Current Gain Group O	h_{FE}	70	-	140	-
Y	h_{FE}	120	-	240	-
at $-V_{CE}=6\text{V}$, $-I_C=400\text{mA}$					
O	h_{FE}	25	-	-	-
Y	h_{FE}	40	-	-	-
Collector Cutoff Current at $-V_{CB}=35\text{V}$	$-I_{CBO}$	-	-	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	0.25	V
Base Emitter Voltage at $-I_C=100\text{mA}$, $-V_{CE}=1\text{V}$	$-V_{BE}$	-	0.8	1	V
Gain Bandwidth Product at $-V_{CE}=6\text{V}$, $-I_C=20\text{mA}$	f_T	-	200	-	MHz
Output Capacitance at $-V_{CB}=6\text{V}$, $f=1\text{MHz}$	C_{OB}	-	13	-	pF