

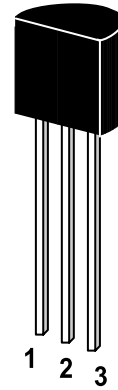
ST 2SA1048

PNP Silicon Epitaxial Planar Transistor

for audio frequency amplifier applications.

The transistor is subdivided into three groups, O, Y and G, according to its DC current gain. As complementary type the NPN transistor ST 2SC2458 is recommended.

On special request, these transistors can be manufactured in different pin configurations.

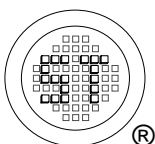


1. Emitter 2. Collector 3. Base

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}	200	mW
Junction Temperature	T_{j}	125	$^\circ\text{C}$
Storage Temperature Range	T_{S}	-55 to +125	$^\circ\text{C}$



SEMTECH ELECTRONICS LTD.

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ISO/TS 16949 : 2002
Certificate No. 05103



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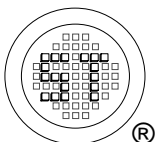
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ST 2SA1048

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	-
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	
Transition Frequency 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 $-V_{CE}=6\text{V}$, $-I_C=0.1\text{mA}$ $f=1\text{kHz}$, $R_G=10\text{K}\Omega$	NF	-	1	10	dB	



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