

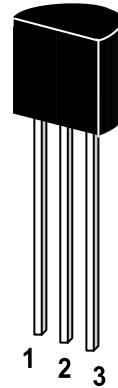
ST 2SC458

NPN Silicon Epitaxial Planar Transistor

Low frequency amplifier applications.

The transistor is subdivided into three group, B, C and D according to its DC current gain.

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

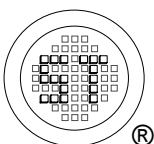


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package
Weight approx. 0.19g

Absolute Maximum Ratings (Ta=25°C)

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	30	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	100	mA
Emitter Current	I_E	-100	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_S	-55 to +150	°C



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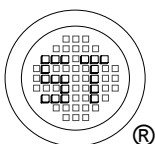


Dated : 07/12/2002

ST 2SC458

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

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=12\text{V}$, $I_C=2\text{mA}$					
Current Gain Group B	h_{FE}	100	-	200	-
C	h_{FE}	160	-	320	-
D	h_{FE}	250	-	500	-
Collector Cutoff Current at $V_{CB}=18\text{V}$	I_{CBO}	-	-	0.5	μA
Emitter Cutoff Current at $V_{EB}=2\text{V}$	I_{EBO}	-	-	0.5	μA
Collector Emitter Saturation Voltage at $I_C=10\text{mA}$, $I_B=1\text{mA}$	$V_{CE(sat)}$	-	-	0.2	V
Transition Frequency at $V_{CE}=12\text{V}$, $I_C=2\text{mA}$	f_T	-	230	-	MHz
Base Emitter Voltage at $I_C=2\text{mA}$, $V_{CE}=12\text{V}$	V_{BE}	-	0.67	0.75	V
Collector Output Capacitance at $V_{CB}=10\text{V}$, $f=1\text{MHz}$	C_{OB}	-	1.8	3.5	pF
Collector Base Breakdown Voltage at $I_C=10\mu\text{A}$	V_{CBO}	30	-	-	V
Collector Emitter Breakdown Voltage at $I_C=1\text{mA}$	V_{CEO}	30	-	-	V
Emitter Base Breakdown Voltage at $I_C=10\mu\text{A}$	V_{EBO}	5	-	-	V
Noise Figure at $V_{CE}=6\text{V}$, $I_C=0.1\text{mA}$, $f=1\text{kHz}$, $R_g=500\Omega$	NF	-	4	10	dB
Small signal input impedance at $V_{CE}=5\text{V}$, $I_C=0.1\text{mA}$, $f=270\text{Hz}$	h_{ie}	-	16.5	-	$\text{k}\Omega$
	h_{ie}	-	70	-	$\times 10^{-6}$
	h_{ie}	-	130	-	-
	h_{ie}	-	11	-	μS



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

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