

2SC2458 NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into four groups, O, Y, G and L, 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)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	50	V
Collector Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Base Current	I_B	50	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_s	-55 to +125	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE}=6V, I_C=2mA$					
Current Gain Group O	h_{FE}	70	-	140	-
Y	h_{FE}	120	-	240	-
G	h_{FE}	200	-	400	-
L	h_{FE}	350	-	700	-
Collector Cutoff Current at $V_{CB}=50V$	I_{CBO}	-	-	0.1	μA
Emitter Cutoff Current at $V_{EB}=5V$	I_{EBO}	-	-	0.1	μA
Collector Emitter Saturation Voltage at $I_C=100mA, I_B=10mA$	$V_{CE(sat)}$	-	0.10	0.25	V
Transition Frequency at $V_{CE}=10V, I_C=1mA$	f_T	80	-	-	MHz
Noise Figure at $V_{CE}=6V, I_C=0.1mA, f=1KHz, R_g=10K\Omega$	NF	-	1.0	10	dB
Collector Output Capacitance at $V_{CB}=10V, f=1MHz$	C_{OB}	-	2.0	3.5	pF