

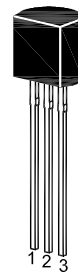
2SC828 / 828A

NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

These transistors are subdivided into three groups Q, R and S according to their DC current gain.

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



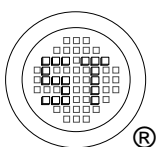
1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	30 45	V
Collector Emitter Voltage	V_{CEO}	25 45	V
Emitter Base Voltage	V_{EBO}	7	V
Collector Current	I_C	50	mA
Peak Collector Current	I_{CM}	100	mA
Power Dissipation	P_{tot}	400	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE} = 5\text{ V}$, $I_C = 2\text{ mA}$	Current Gain Group Q	h_{FE}	130	-	280	-
	R	h_{FE}	180	-	360	-
	S	h_{FE}	260	-	520	-
Collector Base Breakdown Voltage at $I_C = 10\text{ }\mu\text{A}$	V_{CBO}	30 45	-	-	V	
Collector Emitter Breakdown Voltage at $I_C = 2\text{ mA}$	V_{CEO}	25 45	-	-	V	
Emitter Base Breakdown Voltage at $I_C = 10\text{ }\mu\text{A}$	V_{EBO}	7	-	-	V	
Base Emitter Voltage at $I_C = 10\text{ mA}$, $V_{CE} = 5\text{ V}$	V_{BE}	-	-	0.8	V	
Gain Bandwidth Product at $I_C = 2\text{ mA}$, $V_{CE} = 10\text{ V}$	f_T	-	220	-	MHz	



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