

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

Parameter		Symbol	Value	Unit
Collector Base Voltage	2SC828 2SC828A	V_{CBO}	30 45	V
Collector Emitter Voltage	2SC828 2SC828A	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 $T_a = 25^\circ\text{C}$

Parameter		Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at V _{CE} = 5 V, I _C = 2 mA	Current Gain Group	Q R S	h _{FE}	130	-	280	-
			h _{FE}	180	-	360	-
			h _{FE}	260	-	520	-
Collector Base Breakdown Voltage at I _C = 10 μA	2SC828	V _{CBO}	30	-	-	V	
	2SC828A		45	-	-		
Collector Emitter Breakdown Voltage at I _C = 2 mA	2SC828	V _{CEO}	25	-	-	V	
	2SC828A		45	-	-		
Emitter Base Breakdown Voltage at I _C = 10 μA		V _{EBO}	7	-	-	V	
Base Emitter Voltage at I _C = 10 mA, V _{CE} = 5 V		V _{BE}	-	-	0.8	V	
Gain Bandwidth Product at I _C = 2 mA, V _{CE} = 10 V		f _T	-	220	-	MHz	

