

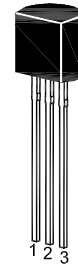
ST 2SC4002

NPN Silicon Epitaxial Planar Transistor

for High-Voltage Driver Applications.

The transistor is subdivided into two groups, D and E, according to its DC current gain.

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



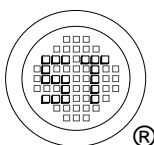
1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	400	V
Collector Emitter Voltage	V_{CEO}	400	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	200	mA
Collector Current (Pulse)	I_{CP}	400	mA
Power Dissipation	P_{tot}	600	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 $V_{CE} = 10\text{ V}$, $I_C = 50\text{ mA}$	Current Gain Group D	h_{FE}	60	-	120	-
	Current Gain Group E	h_{FE}	100	-	200	-
Collector Base Cutoff Current at $V_{CB} = 300\text{ V}$	I_{CBO}	-	-	0.1	μA	
Emitter Base Cutoff Current at $V_{EB} = 4\text{ V}$	I_{EBO}	-	-	0.1	μA	
Collector Emitter Saturation Voltage at $I_C = 50\text{ mA}$, $I_B = 5\text{ mA}$	$V_{CE(sat)}$	-	-	0.6	V	
Base Emitter Saturation Voltage at $I_C = 50\text{ mA}$, $I_B = 5\text{ mA}$	$V_{BE(sat)}$	-	-	1.0	V	
Gain Bandwidth Product at $V_{CE} = 30\text{ V}$, $I_C = 10\text{ mA}$	f_T	-	70	-	MHz	



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