2SC4002 NPN Silicon Triple Diffused 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
Weight approx. 0.18g

Absolute Maximum Ratings ($T_a = 25^oC$)

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	^OC
Storage Temperature Range	T_S	-55 to +150	^OC

Characteristics at T_{amb}=25 °C

Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain						
at V_{CE}=10V, I_C=50mA						-
Current Gain Group	D	h_{FE}	60	-	120	-
	E	h_{FE}	100	-	200	-
Collector Cutoff Current						
at V_{CB}=300V		I_{CBO}	-	-	0.1	μA
Emitter Cutoff Current						
at V_{EB}=4V		I_{EBO}	-	-	0.1	μA
Collector Emitter Saturation Voltage						
at I_C=50mA, I_B=5mA		$V_{CE(sat)}$	-	-	0.6	V
Base Emitter Saturation Voltage						
at I_C=50mA, I_B=5mA		$V_{BE(sat)}$	-	-	1.0	V
Gain Bandwidth Product						
at V_{CE}=30V, I_C=10mA		f_T	-	70	-	MHz