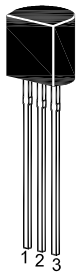
2SC2002

NPN Silicon Epitaxial Planar Transistor
for use in driver stage of high voltage audio equipments.

The transistor is subdivided into three groups, M, L and K, 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 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	60	V
Collector Emitter Voltage	V_{CEO}	60	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	300	mA
Base Current	I_B	60	mA
Power Dissipation	P_{tot}	600	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter			Symbol	Min.	Typ.	Max.	Unit
DC Current Gain							
at V_{CE} = 1 V, I_C = 50 mA	Current Gain Group	M	h_{FE}	90	-	180	-
		L	h_{FE}	135	-	270	-
		K	h_{FE}	200	-	400	-
at V_{CE} = 2 V, I_C = 300 mA			h_{FE}	30	80	-	-
Collector Base Cutoff Current at V_{CB} = 60 V			I_{CBO}	-	-	100	nA
Emitter Base Cutoff Current at V_{EB} = 5 V			I_{EBO}	-	-	100	nA
Collector Emitter Saturation Voltage at I_C = 300 mA, I_B = 30 mA			$V_{CE(sat)}$	-	0.15	0.6	V
Base Emitter Saturation Voltage at I_C = 300 mA, I_B = 30 mA			$V_{BE(sat)}$	-	0.86	1.2	V
Base Emitter Voltage at I_C = 10 mA, V_{CE} = 6 V			V_{BE}	600	645	700	mV
Gain Bandwidth Product at V_{CE} = 6 V, I_E = -10 mA			f_T	50	140	-	MHz
Collector to Base Capacitance at V_{CB} = 6 V, f = 1 MHz			C_{ob}	-	7.0	15	pF