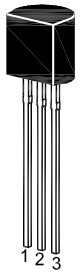
1702

NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications

The transistor is subdivided into five groups, L, M, N, O and P, according to its DC current gain.

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



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

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	30	V
Collector Emitter Voltage	V_{CEO}	25	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
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 = 100 mA	Current Gain Group	L	h_{FE}	132	-	189	-
		M	h_{FE}	170	-	233	-
		N	h_{FE}	213	-	300	-
		O	h_{FE}	263	-	370	-
		P	h_{FE}	333	-	476	-
Collector Base Cutoff Current at V_{CB} = 20 V			I_{CBO}	-	-	0.1	µA
Emitter Base Cutoff Current at V_{EB} = 5 V			I_{EBO}	-	-	0.5	µA
Collector Base Breakdown Voltage at I_C = 10 µA			$V_{(BR)CBO}$	30	-	-	V
Collector Emitter Breakdown Voltage at I_C = 10 mA			$V_{(BR)CEO}$	25	-	-	V
Emitter Base Breakdown Voltage at I_E = 100 µA			$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at I_C = 500 mA, I_B = 50 mA			$V_{CE(sat)}$	-	-	0.7	V
Gain Bandwidth Product at V_{CE} = 5 V, I_C = 10 mA			f_T	-	100	-	MHz
Output Capacitance at V_{CB} = 5 V, f = 1 MHz			C_{ob}	-	12	-	pF