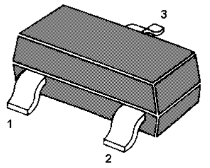
MMBTSC3199

NPN Silicon Epitaxial Planar Transistor

for switching and AF amplifier applications.

The transistor is subdivided into four groups O, Y, G and L, according to its DC current gain.

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



1.BASE 2.EMITTER 3.COLLECTOR

TO-236 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	50	V
Collector Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Emitter Current	I_E	-150	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	- 55 to + 125	°C

Characteristics at T_{amb}=25 °C

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at V_{CE} = 6 V, I_C = 2 mA Current Gain Group O	h_{FE}	70	140	-
Y	h_{FE}	120	240	-
G	h_{FE}	200	400	-
L	h_{FE}	350	700	-
Collector Base Cutoff Current at V_{CB} = 50 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 = 100 mA, I_B = 10 mA	$V_{CE(sat)}$	-	0.25	V
Transition Frequency at V_{CE} = 10 V, I_C = 1 mA	f_T	80	-	MHz
Collector Output Capacitance at V_{CB} = 10 V, f = 1 MHz	C_{ob}	-	3.5	pF