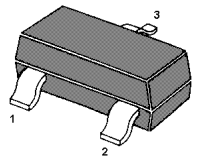
MMBTSC2785

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

Characteristics at T_{amb}=25 °C

Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at V_{CE} = 6 V, I_C = 1 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} = 40 V		I_{CBO}	-	-	100	nA
Emitter Base Cutoff Current at V_{EB} = 3 V		I_{EBO}	-	-	100	nA
Collector Base Breakdown Voltage at I_C = 100 µA		$V_{(BR)CBO}$	60	-	-	V
Collector Emitter Breakdown Voltage at I_C = 10 mA		$V_{(BR)CEO}$	50	-	-	V
Emitter Base Breakdown Voltage at I_E = 10 µA		$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at I_C = 100 mA, I_B = 10 mA		$V_{CE(sat)}$	-	-	0.3	V
Gain Bandwidth Product at V_{CE} = 6 V, I_C = 10 mA		f_T	-	300	-	MHz
Output Capacitance at V_{CB} = 6 V, f = 1 MHz		C_{ob}	-	2.5	-	pF

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