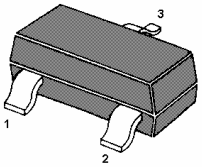
MMBTSD471

NPN Silicon Epitaxial Planar Transistor
Audio Frequency Power amplifier applications.

The transistor is subdivided into three group O, Y and G according to its DC current gain.

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

SOT-23



1.BASE 2.EMITTER 3.COLLECTOR

SOT-23 Plastic Package

Absolute Maximum Ratings (Ta=25 °C)

	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	40	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_S	-55 to +150	°C

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Characteristics at T_{amb}=25 °C

		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at V_{CE}=1V, I_C=100mA						
Current Gain Group	O	h_{FE}	90	-	180	-
	Y	h_{FE}	135	-	270	-
	G	h_{FE}	200	-	400	-
Collector Emitter Breakdown Voltage at I_C=10mA		$V_{(BR)CEO}$	30	-	-	V
Collector Base Breakdown Voltage at I_C=100µA		$V_{(BR)CBO}$	40	-	-	V
Emitter Base Breakdown Voltage at I_E=100µA		$V_{(BR)EBO}$	5	-	-	V
Collector Cutoff Current at V_{CB}=30V		I_{CBO}	-	-	0.1	µA
Collector Saturation Voltage at I_C=1.0A, I_B=100mA		$V_{CE(sat)}$	-	-	0.5	V
Base Saturation Voltage at I_C=1.0A, I_B=100mA		$V_{BE(sat)}$	-	-	1.2	V
Collector Output Capacitance at V_{CB}=6V, f=1MHz		C_{OB}	-	18	-	pF
Transition Frequency at V_{CE}=6V, I_C=10mA		f_T	-	130	-	MHz