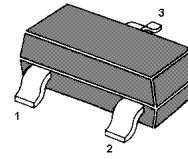


MMBTSA2018

PNP Silicon Epitaxial Planar Transistor

Low Frequency Transistor
for switching and muting applications.



Features:

- A collector current is large.
 - Collector saturation voltage is low.
- $-V_{CE(sat)}$: 250mV(Max.) at $-I_C=200mA/-I_B=10mA$

1. Base 2. Emitter 3. Collector
SOT-23 Plastic Package

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	15	V
Collector Emitter Voltage	$-V_{CEO}$	12	V
Collector Current	$-I_C$	500	mA
	$-I_{CP}^{1)}$	1	A
Collector Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{Stg}	-55 to +150	$^\circ\text{C}$

¹⁾ Single pulse, $P_W=1\text{ms}$

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Characteristics at $T_{amb}=25\text{ }^{\circ}\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
DC Current Transfer Ratio at $-I_C=10\text{mA}$, $-V_{CE}=2\text{V}$	h_{FE}	270	-	680	-
Collector Cutoff Current at $-V_{CB}=15\text{V}$	$-I_{CBO}$	-	-	100	nA
Collector Base Breakdown Voltage at $-I_C=10\mu\text{A}$	$-V_{(BR)CBO}$	15	-	-	V
Collector Emitter Breakdown Voltage at $-I_C=1\text{mA}$	$-V_{(BR)CEO}$	12	-	-	V
Emitter Base Breakdown Voltage at $-I_E=10\mu\text{A}$	$-V_{(BR)EBO}$	6	-	-	V
Collector Emitter Saturation Voltage at $-I_C=200\text{mA}$, $-I_B=10\text{mA}$	$-V_{CE(sat)}$	-	-	250	mV
Transition Frequency at $-V_{CE}=2\text{V}$, $-I_E=10\text{mA}$, $f=100\text{MHz}$	f_T	-	260	-	MHz
Output Capacitance at $-V_{CB}=10\text{V}$, $f=1\text{MHz}$	C_{ob}	-	6.5	-	pF