

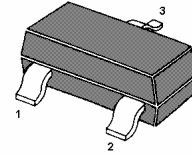
MMBTA44

NPN Silicon Epitaxial Planar Transistor

for high voltage switching and amplifier applications.

The transistor is subdivided into one group according to its DC current gain. As complementary type the PNP transistor MMBTA94 is recommended.

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

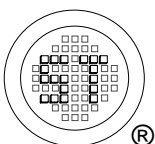


1. Base 2. Emitter 3. Collector

SOT-23 Plastic Package

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

	Symbol	Value	Unit
Collector Base Voltage	V_{CB0}	500	V
Collector Emitter Voltage	V_{CEO}	400	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_C	300	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +150	$^\circ\text{C}$



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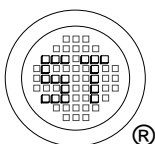


Dated : 20/10/2005

MMBTA44

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

	Symbol	Min.	Max.	Unit
DC Current Gain				
at $I_C=1\text{mA}$, $V_{CE}=10\text{V}$	h_{FE}	25	-	-
at $I_C=10\text{mA}$, $V_{CE}=10\text{V}$	h_{FE}	40	-	-
at $I_C=30\text{mA}$, $V_{CE}=10\text{V}$	h_{FE}	40	-	-
Emitter Cutoff Current				
at $V_{EB}=4\text{V}$	I_{EBO}	-	0.1	μA
Collector Cutoff Current				
at $V_{CB}=400\text{V}$	I_{CBO}	-	0.1	μA
Collector Cutoff Current				
at $V_{CE}=400\text{V}$	I_{CEO}	-	0.5	μA
Collector Base Breakdown Voltage				
at $I_C=100\mu\text{A}$	$V_{(BR)CBO}$	500	-	V
Collector Emitter Breakdown Voltage				
at $I_C=1\text{mA}$	$V_{(BR)CEO}$	400	-	V
Emitter Base Breakdown Voltage				
at $I_E=100\mu\text{A}$	$V_{(BR)EBO}$	6	-	V
Collector Saturation Voltage				
at $I_C=1\text{mA}$, $I_B=0.1\text{mA}$	$V_{CE(sat)}$	-	0.4	V
at $I_C=10\text{mA}$, $I_B=1\text{mA}$	$V_{CE(sat)}$	-	0.5	V
at $I_C=50\text{mA}$, $I_B=5\text{mA}$	$V_{CE(sat)}$	-	0.75	V
Base Saturation Voltage				
at $I_C=10\text{mA}$, $I_B=1\text{mA}$	$V_{BE(sat)}$	-	0.75	V
Collector Output Capacitance				
at $V_{CB}=20\text{V}$, $f=1\text{MHz}$	C_{ob}	-	7	pF



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 050698

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