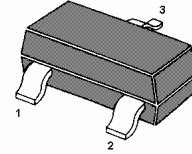


# MMBTSA812

## PNP Silicon Epitaxial Planar Transistor

for audio frequency, general purpose amplifier.

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

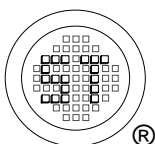


1. Base 2. Emitter 3. Collector

SOT-23 Plastic Package

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

	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	$-I_C$	100	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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ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 71116



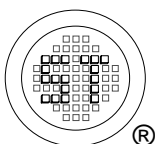
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Dated : 20/10/2005

# MMBTA812

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

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}=6\text{V}$ , $-I_C=1\text{mA}$					
Current Gain Group O	$h_{FE}$	90	-	180	-
Y	$h_{FE}$	135	-	270	-
G	$h_{FE}$	200	-	400	-
L	$h_{FE}$	300	-	600	-
Collector Cutoff Current at $-V_{CB}=60\text{V}$	$-I_{CBO}$	-	-	0.1	$\mu\text{A}$
Emitter Cutoff Current at $-V_{EB}=5\text{V}$	$-I_{EBO}$	-	-	0.1	$\mu\text{A}$
Collector Saturation Voltage at $-I_C=100\text{mA}$ , $-I_B=10\text{mA}$	$-V_{CE(sat)}$	-	-	0.3	V
Base Emitter Voltage at $-V_{CE}=6\text{V}$ , $-I_C=1\text{mA}$	$-V_{BE}$	0.58	-	0.68	V
Gain Bandwidth Product at $-V_{CE}=6\text{V}$ , $-I_C=10\text{mA}$	$f_T$	-	180	-	MHz
Output Capacitance at $-V_{CB}=10\text{V}$ , $f=1\text{MHz}$	$C_{OB}$	-	4.5	-	pF



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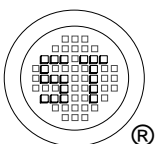
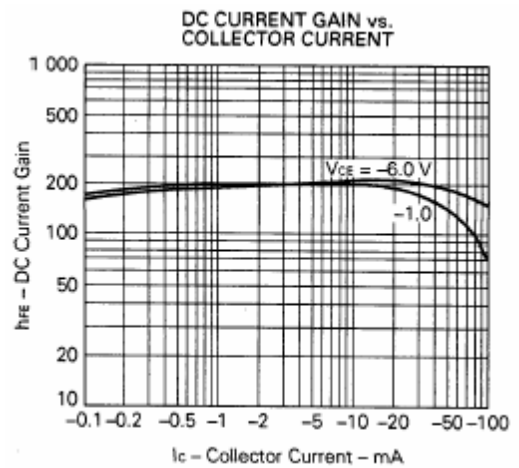
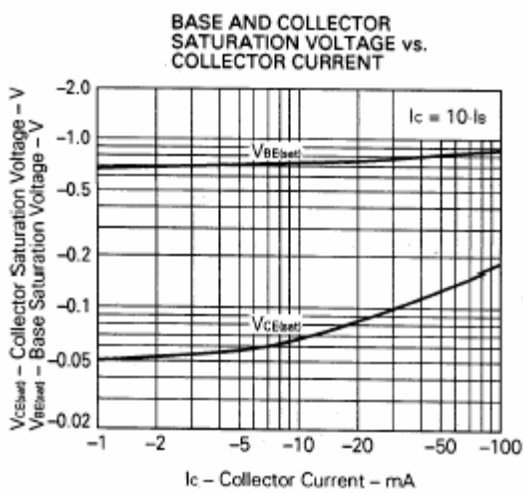
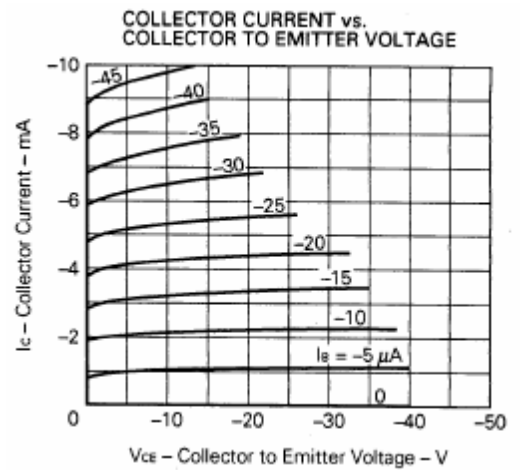
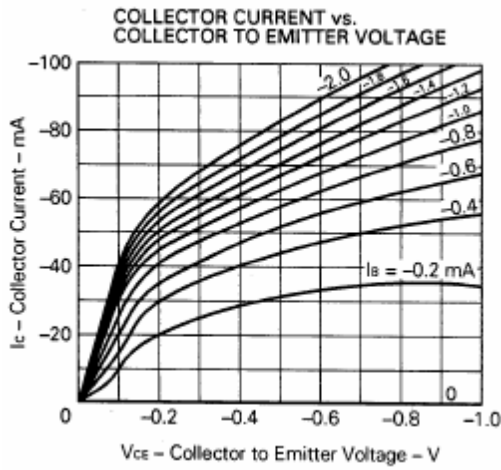
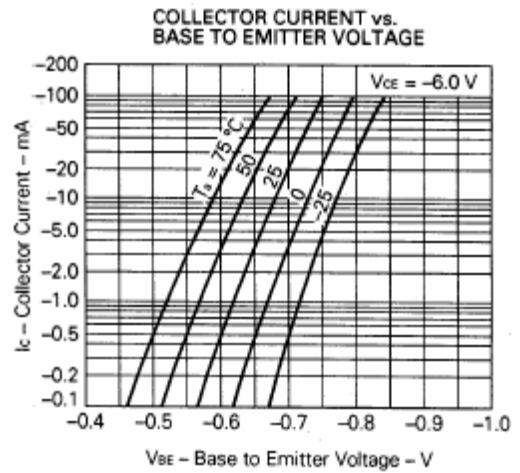
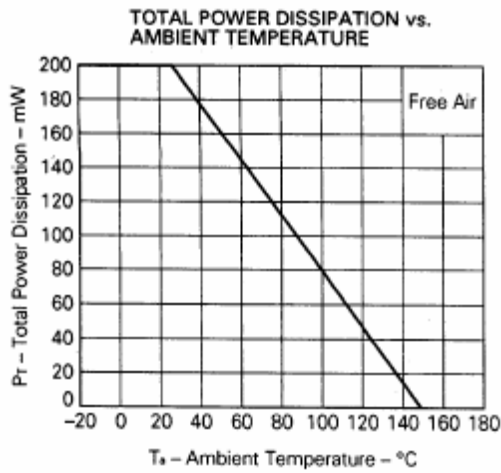
ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506098

Dated : 20/10/2005

# MMBTS812



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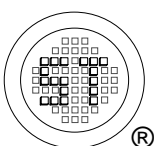
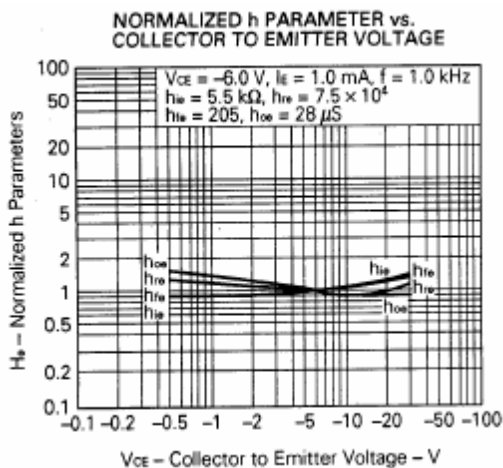
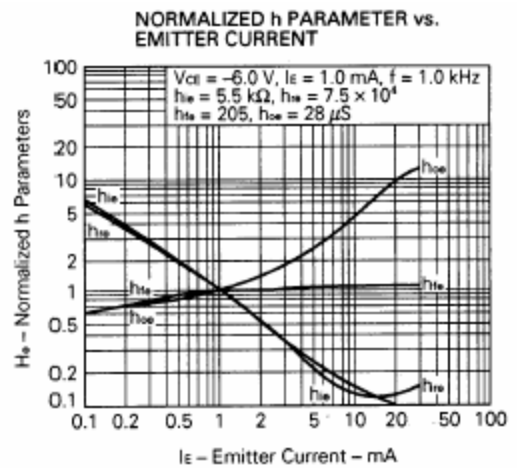
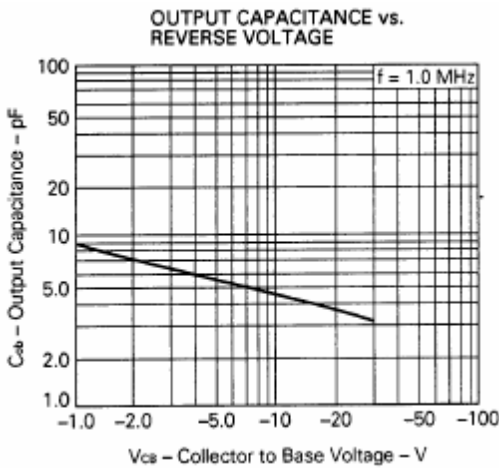
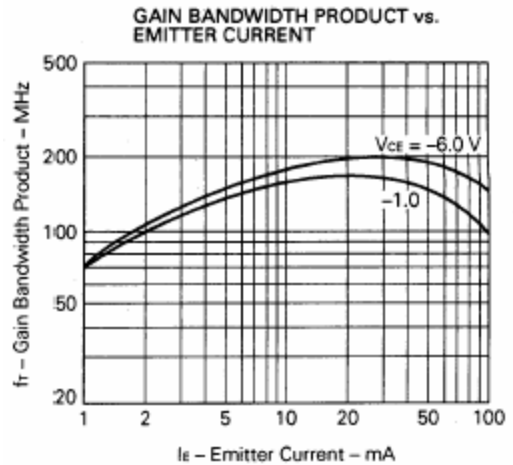
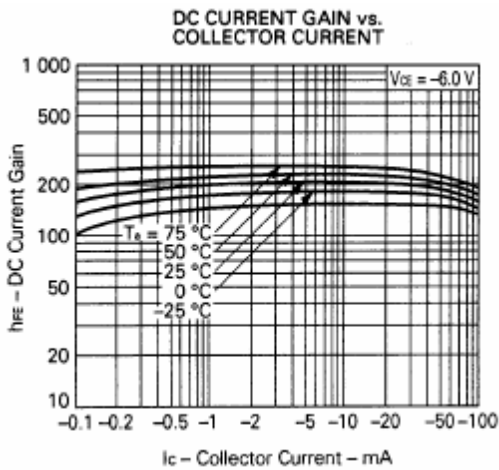


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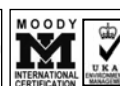
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