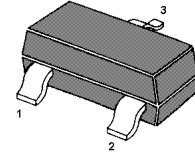


MMBTA56

PNP General Purpose Transistor for amplifier applications

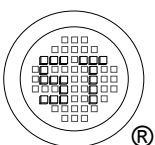
On special request, these transistors can be manufactured in different pin configurations.



1. Base 2. Emitter 3. Collector
TO-236 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	80	V
Collector Emitter Voltage	$-V_{CES}$	80	V
Emitter Base Voltage	$-V_{EBO}$	4	V
Collector Current	$-I_C$	500	mA
Power Dissipation	P_{tot}	200	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Junction Temperature	T_j	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{Stg}	-55 to +150	$^\circ\text{C}$



SEMTECH ELECTRONICS LTD.

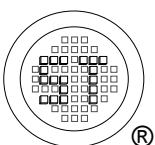
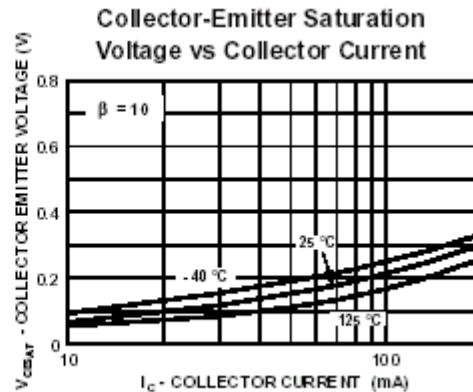
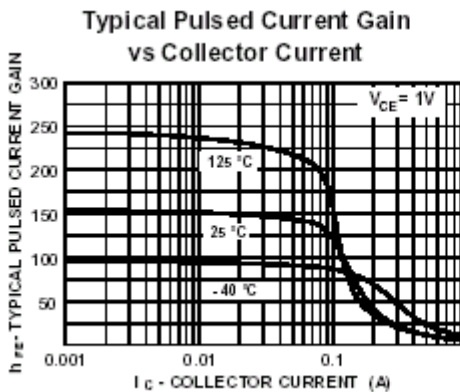


Dated: 16/03/2015 Rev: 01

MMBTA56

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

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $-I_C = 10\text{ mA}$, $-V_{CE} = 1\text{ V}$ at $-I_C = 100\text{ mA}$, $-V_{CE} = 1\text{ V}$	h_{FE} h_{FE}	100 100	- -	- -
Collector Cutoff Current at $-V_{CB} = 80\text{ V}$	$-I_{CBO}$	-	100	nA
Collector Cutoff Current at $-V_{CE} = 60\text{ V}$	$-I_{CES}$	-	100	nA
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	$-V_{(BR)CEO}$	80	-	V
Collector Base Breakdown Voltage at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	80	-	V
Emitter Base Breakdown Voltage at $-I_E = 100\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	4	-	V
Collector Emitter Saturation Voltage at $-I_C = 100\text{ mA}$, $-I_B = 10\text{ mA}$	$-V_{CE(sat)}$	-	0.25	V
Base Emitter On Voltage at $-V_{CE} = 1\text{ V}$, $-I_C = 100\text{ mA}$,	$-V_{BE(on)}$	-	1.2	V
Gain Bandwidth Product at $-V_{CE} = 1\text{ V}$, $-I_C = 100\text{ mA}$, $f = 100\text{ MHz}$	f_T	50	-	MHz



SEMTECH ELECTRONICS LTD.



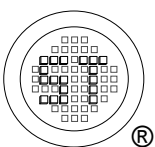
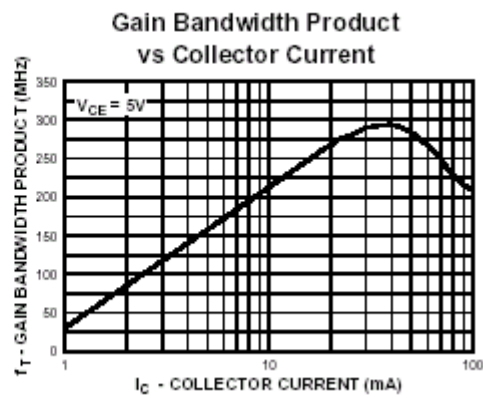
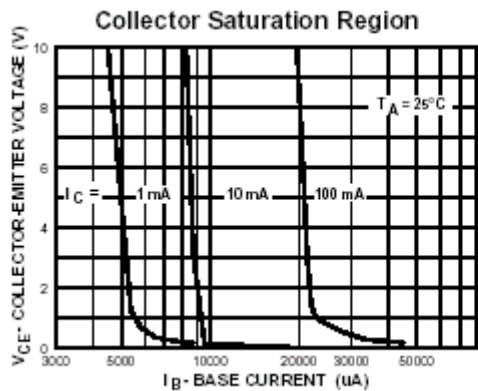
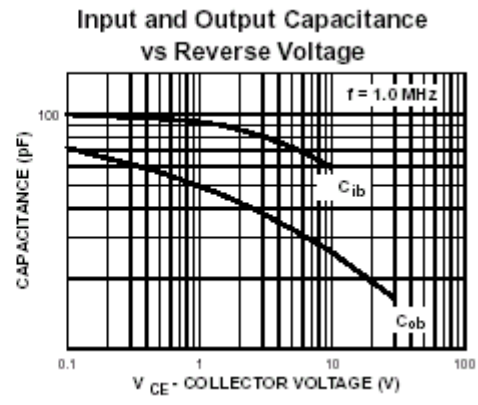
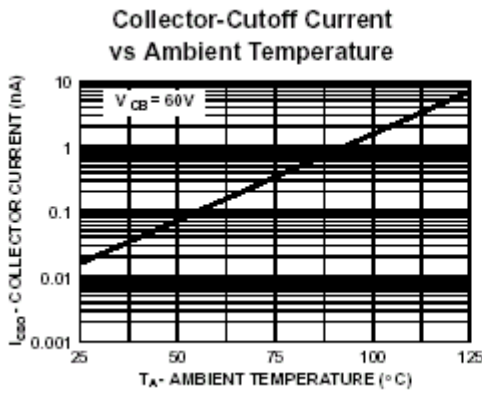
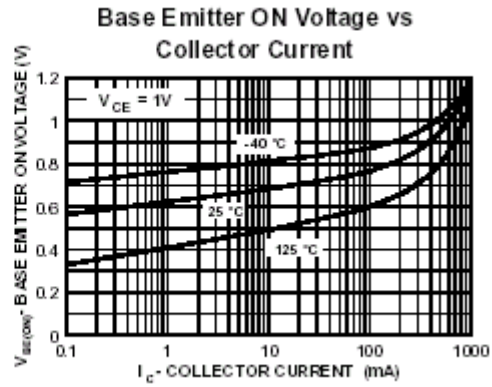
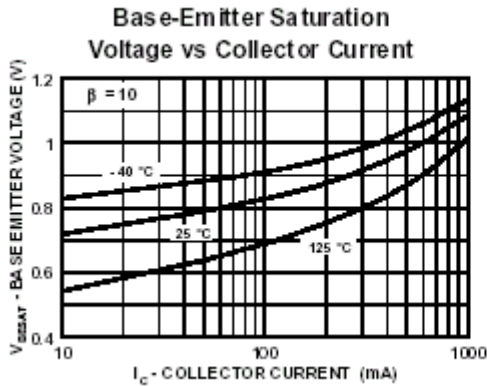
ISO/TS 16949:2009
Certificate No. 160713000

ISO 14001:2004
Certificate No. 7116

ISO 9001:2008
Certificate No. 90719410

BS-OHSAS 18001:2007
Certificate No. 7116

IECQ QC 080000
Certificate No. PRC-HSPM-1485-1



SEMTECH ELECTRONICS LTD.

