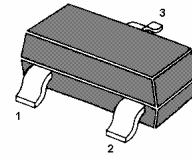


MMBTSA1504

PNP Silicon Epitaxial Planar Transistor

For switching and general purpose applications.

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

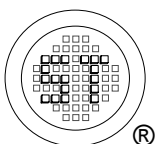


1. Base 2. Emitter 3. Collector

SOT-23 Plastic Package

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

	Symbol	Value	Unit
Collector Emitter Voltage	$-V_{CEO}$	50	V
Collector Base Voltage	$-V_{CBO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	150	mA
Base Current	$-I_B$	30	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_s	-55 to +150	$^\circ\text{C}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)

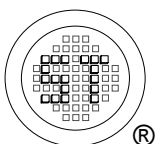


Dated : 20/10/2005

MMBTSA1504

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

	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}=6\text{V}$, $-I_C=2\text{mA}$					
Current Gain Group O	h_{FE}	70	-	140	-
Y	h_{FE}	120	-	240	-
G	h_{FE}	200	-	400	-
Collector Cutoff Current at $-V_{CB}=50\text{V}$	$-I_{CBO}$	-	-	0.1	μA
Emitter Cutoff Current at $-V_{EB}=5\text{V}$	$-I_{EBO}$	-	-	0.1	μA
Collector Saturation Voltage at $-I_C=100\text{mA}$, $-I_B=10\text{mA}$	$-V_{CE(sat)}$	-	-	0.3	V
Transition Frequency at $-V_{CE}=10\text{V}$, $-I_C=1\text{mA}$	f_T	80	-	-	MHz
Collector Output Capacitance at $-V_{CB}=10\text{V}$, $f=1\text{MHz}$	C_{OB}	-	4	7	pF
Noise Figure at $-V_{CE}=6\text{V}$, $-I_C=0.1\text{mA}$, $f=1\text{KHz}$, $R_G=10\text{K}\Omega$	NF	-	1	10	dB



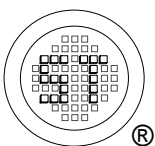
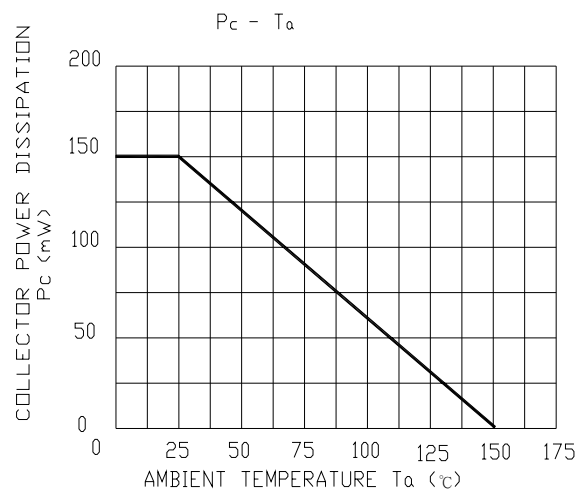
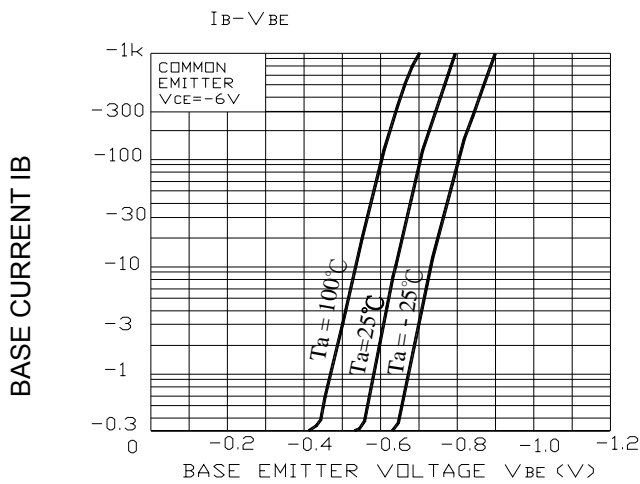
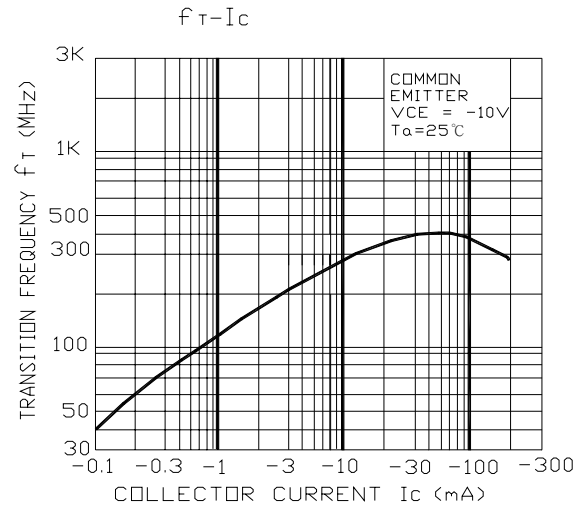
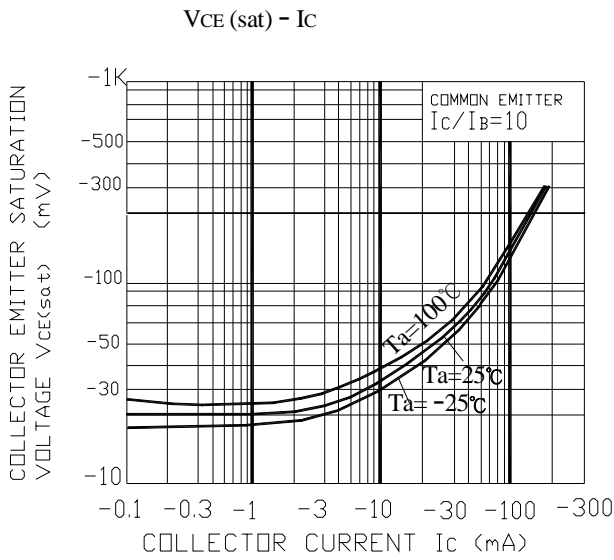
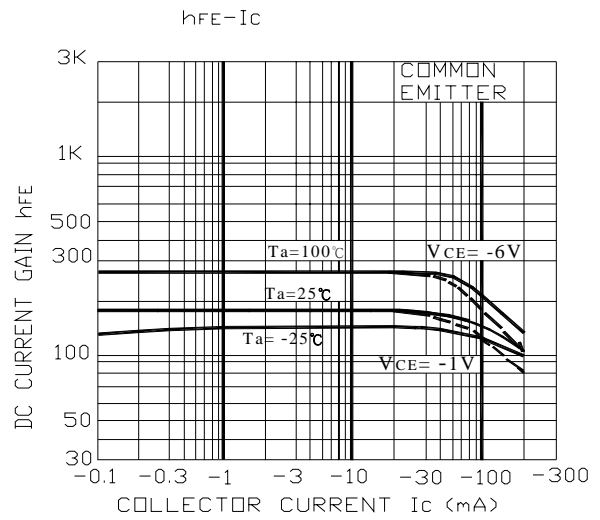
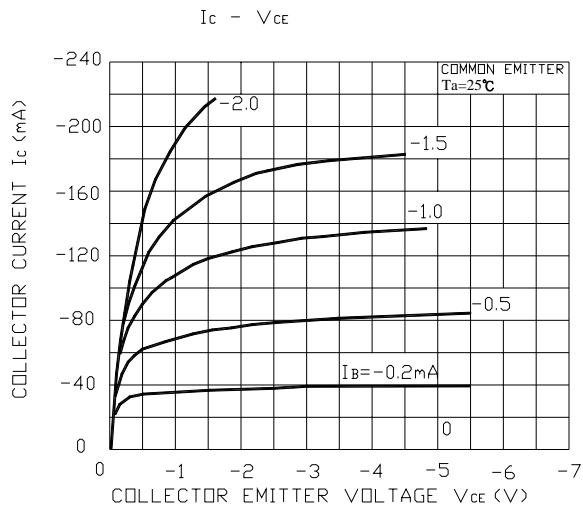
SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)

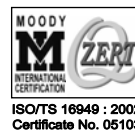


Dated : 20/10/2005

MMBTA1504



SEMTECH ELECTRONICS LTD.
(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103

ISO 14001:2004
Certificate No. 71116

ISO 9001:2000
Certificate No. 0506098

Dated : 20/10/2005