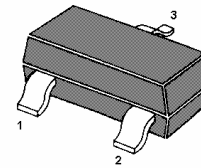


MMBTSA1298

PNP Silicon Epitaxial Planar Transistor

for low frequency power amplifier and power switching applications

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



1.BASE 2.EMITTER 3.COLLECTOR

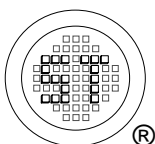
SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{\text{CBO}}$	30	V
Collector Emitter Voltage	$-V_{\text{CEO}}$	25	V
Emitter Base Voltage	$-V_{\text{EBO}}$	5	V
Collector Current	$-I_{\text{C}}$	800	mA
Base Current	$-I_{\text{B}}$	160	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_{j}	150	$^\circ\text{C}$
Storage Temperature Range	T_{s}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $-V_{\text{CE}} = 1\text{ V}$, $-I_{\text{C}} = 100\text{ mA}$	O	h_{FE}	100	-	200	-
	Y	h_{FE}	160	-	320	-
		h_{FE}	40	-	-	-
Collector Cutoff Current at $-V_{\text{CB}} = 30\text{ V}$	$-I_{\text{CBO}}$	-	-	0.1	μA	
Emitter Cutoff Current at $-V_{\text{EB}} = 5\text{ V}$	$-I_{\text{EBO}}$	-	-	0.1	μA	
Collector Saturation Voltage at $-I_{\text{C}} = 500\text{ mA}$, $-I_{\text{B}} = 20\text{ mA}$	$-V_{\text{CE(sat)}}$	-	-	0.4	V	
Base Emitter Voltage at $-V_{\text{CE}} = 1\text{ V}$, $-I_{\text{C}} = 10\text{ mA}$	$-V_{\text{BE}}$	0.5	-	0.8	V	
Collector Emitter Breakdown Voltage at $-I_{\text{C}} = 10\text{ mA}$	$-V_{\text{(BR)CEO}}$	25	-	-	V	
Emitter Base Breakdown Voltage at $-I_{\text{E}} = 0.1\text{ mA}$	$-V_{\text{(BR)EBO}}$	5	-	-	V	
Transition Frequency at $-V_{\text{CE}} = 5\text{ V}$, $-I_{\text{C}} = 10\text{ mA}$	f_{T}	-	120	-	MHz	
Collector Output Capacitance at $-V_{\text{CB}} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	13	-	pF	



SEMTECH ELECTRONICS LTD.

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ISO/TS 16949 : 2002
Certificate No. 05103



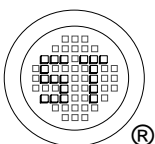
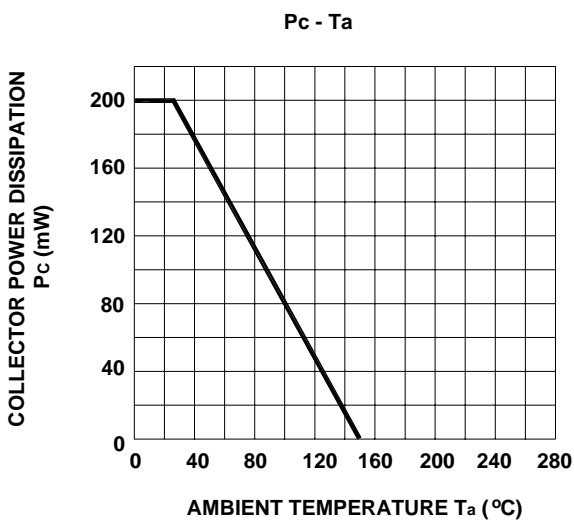
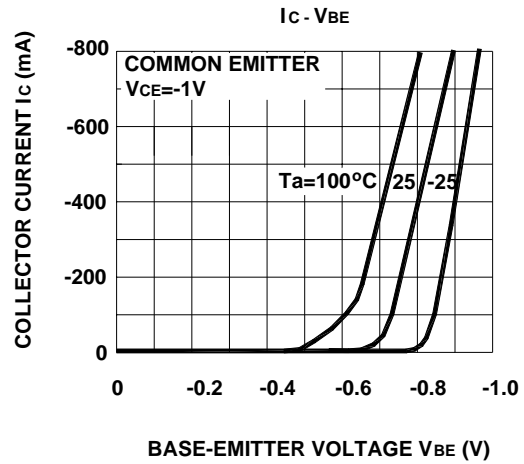
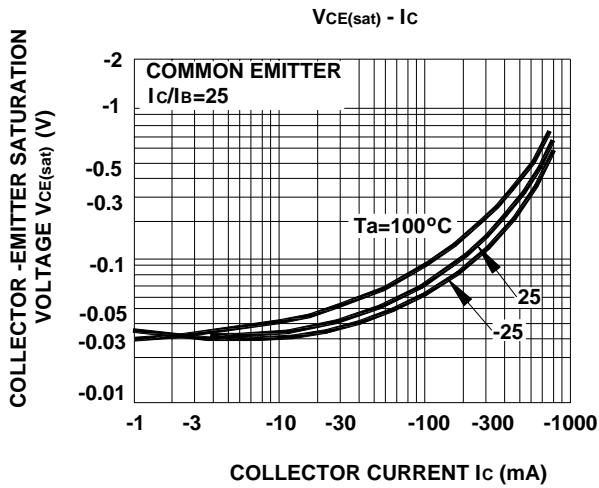
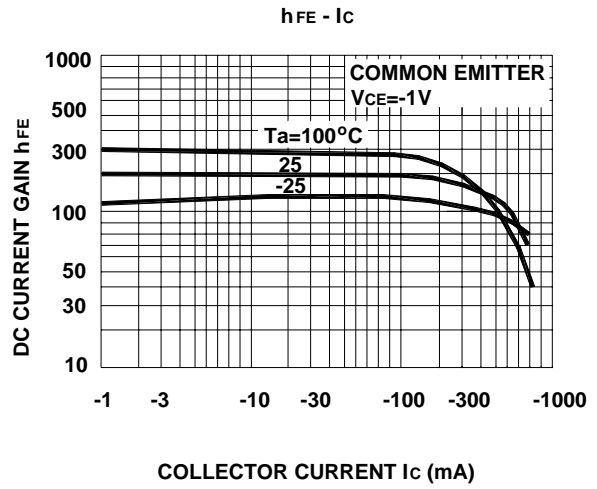
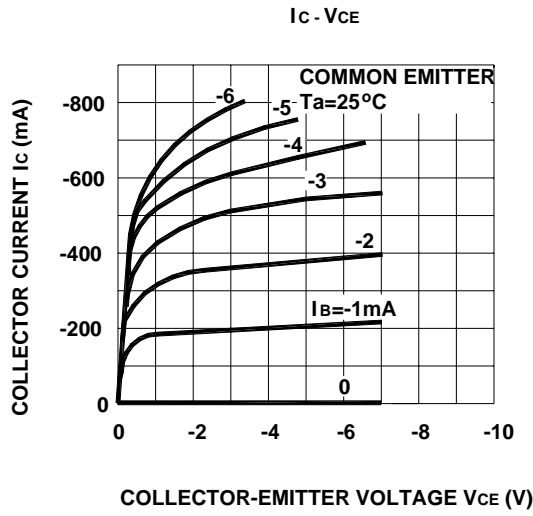
ISO 14001:2004
Certificate No. 7116



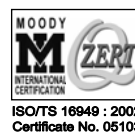
ISO 9001:2000
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Dated : 18/04/2006

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