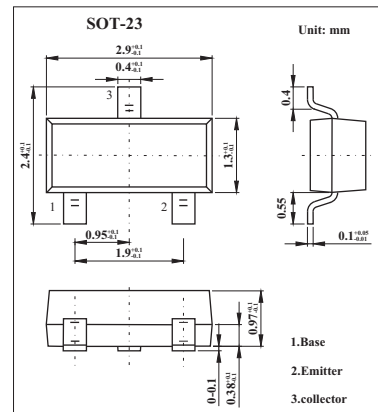


MMBTH10

■ Features

- High Current Gain Bandwidth Product
- Ideal for Mixer and RF Amplifier Applications

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	30	V
Collector - Emitter Voltage	V_{CEO}	25	V
Emitter - Base Voltage	V_{EBO}	3	V
Collector Current - Continuous	I_C	50	mA
Collector Power Dissipation	P_D	300	mW
Thermal Resistance, Junction to Ambient (Note 1)	$R_{\theta JA}$	417	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to 150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collecto- base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100 \mu\text{A}, I_E = 0$	30			V
Collector- emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 0.1 \text{ mA}, I_B = 0$	25			V
Emitter - base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10 \mu\text{A}, I_C = 0$	3			V
Collector cut-off current	I_{CBO}	$V_{CB} = 25 \text{ V}, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 2 \text{ V}, I_C = 0$			0.1	μA
DC current gain	h_{FE}	$V_{CE} = 10 \text{ V}, I_C = 4 \text{ mA}$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 4 \text{ mA}, I_B = 5 \text{ mA}$			0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 50 \text{ mA}, I_B = 0.4 \text{ mA}$			0.5	V
Transition frequency	f_T	$V_{CE} = 10 \text{ V}, I_C = 4 \text{ mA}, f = 100 \text{ MHz}$	650			MHz

■ Marking

Marking	3EM
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