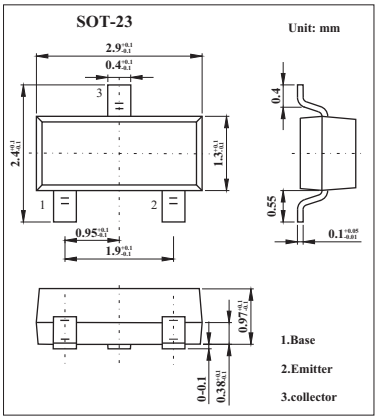
NPN Silicon VHF/UHF Transistor

MMBTH10



■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

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	℃/W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{stg}	-55 to 150	℃

■ Electrical Characteristics Ta = 25℃

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

■ Marking

Marking	3EM