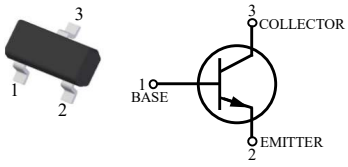
MMBTA06H

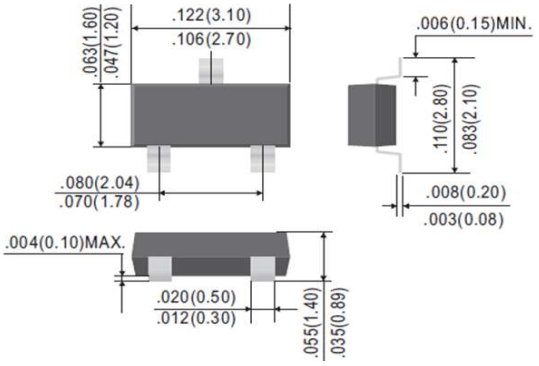
NPN TRANSISTOR

FEATURES

· Suffix "H" indicates Halogen-free parts, ex. MMBTA06H



SOT-23



Dimensions in inches and (millimeter)

Maximum Ratings(T_A=25 ℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	80	V
Collector Emitter Voltage	V_{CEO}	80	V
Emitter Base Voltage	V_{EBO}	4	V
Collector Current	I_C	500	mA
Power Dissipation	P_{tot}	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	℃/W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	- 55 to + 150	℃

Electrical Characteristics(T_A=25 ℃ unless otherwise specified)

Parameter	Conditions	Symbol	Min.	Max.	Unit
DC Current Gain	I_C= 10mA, V_{CE}= 1V I_C= 100mA, V_{CE}= 1V	h_{FE}	100 100	- -	-
Collector Base Cutoff Current	V_{CB}= 80V	I_{CBO}	-	100	nA
Collector Emitter Cutoff Current	V_{CE}= 60V	I_{CES}	-	100	nA
Collector Base Breakdown Voltage	I_C= 100μA	$V_{(BR)CBO}$	80	-	V
Collector Emitter Breakdown Voltage	I_C= 1mA	$V_{(BR)CEO}$	80	-	V
Emitter Base Breakdown Voltage	I_E= 100μA	$V_{(BR)EBO}$	4.0	-	V
Collector Emitter Saturation Voltage	I_C= 100mA, I_B= 10mA	$V_{CE(sat)}$	-	0.25	V
Base Emitter On Voltage	V_{CE}= 1V, I_C= 100mA	$V_{BE(on)}$	-	1.20	V
Gain Bandwidth Product	I_C= 10mA, V_{CE}= 2V, f= 100MHz	f_T	100	-	MHz

RATINGS AND CHARACTERISTIC CURVES

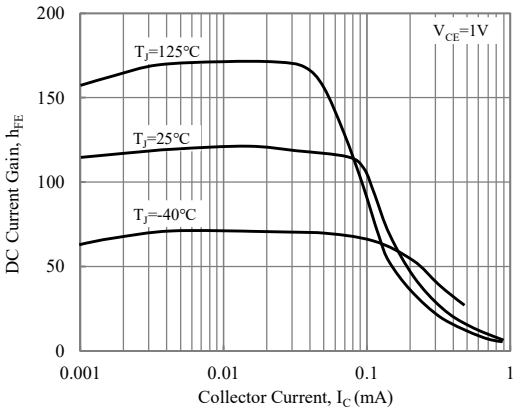


Fig. 1-Current Gain vs Collector Current

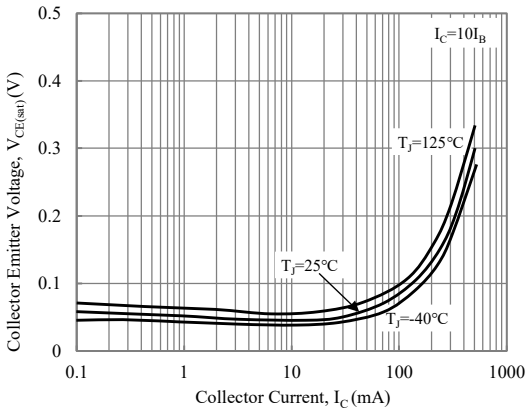


Fig. 2-Collector Emitter Saturation Voltage vs Collector Current

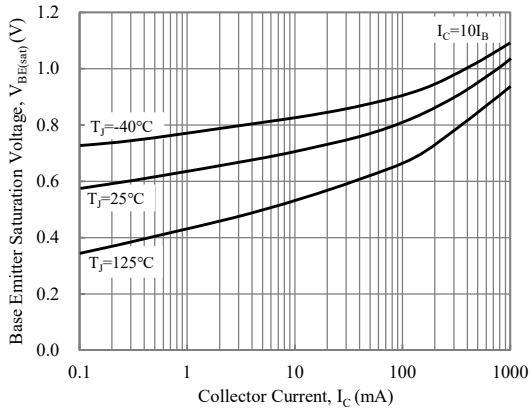


Fig. 3-Base Emitter Saturation Voltage vs Collector Current

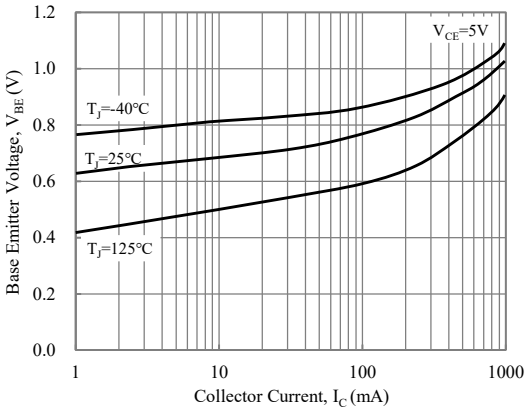


Fig. 4-Base Emitter Voltage vs Collector Current

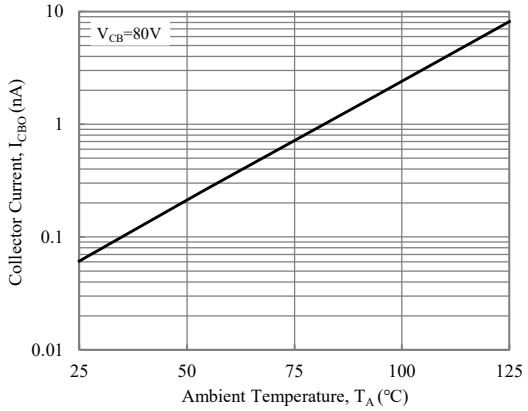


Fig. 5-Collector Base Cutoff Current vs Ambient Temperature