

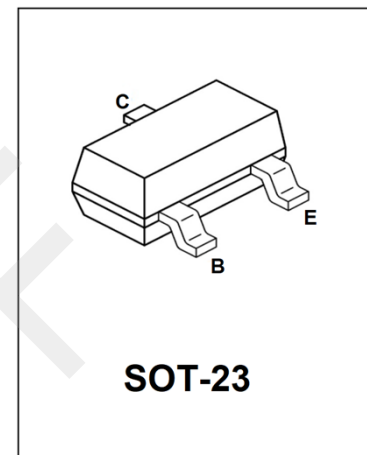
MMBTA44

Package: SOT-23

Complement to MMBTA94

Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating	Unit
Collector-base voltage	BV_{CBO}	500	V
Collector-emitter voltage	BV_{CEO}	400	V
Emitter-base voltage	BV_{EBO}	6	V
Collector current	I_{CM}	300	mA
Collector Power Dissipation	P_C	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C



Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=100\ \mu A, I_E=0$	500			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=1mA, I_B=0$	400			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=100\ \mu A, I_C=0$	6			V
collector-base cut-off current	I_{CBO}	$V_{CB}=400V, I_E=0$			0.1	μA
collector-emitter cut-off current	I_{CEO}	$V_{CE}=400V, I_B=0$			0.5	μA
emitter-base cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$			0.1	μA
DC current gain	H_{FE1}	$V_{CE}=10V, I_B=1mA$	40			
	H_{FE2}	$V_{CE}=10V, I_B=10mA$	50		300	
	H_{FE3}	$V_{CE}=10V, I_B=100mA$	40			
collector-emitter saturation voltage	$V_{CE(SAT)}$	$I_C=10mA, I_B=1mA$			0.5	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C=10mA, I_B=1mA$			0.75	V
Transition frequency	f_T	$V_{CE}=20V, I_B=10mA, = 100\ MHz$	50			MHz