

Features

• General Purpose Amplifier Applications

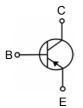
C E B

1. BASE

2. EMITTER

3. COLLECTOR

SOT-23



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MMBTA56LT1G	SOT-23	2GM	3000

Maximum Ratings (Ta=25°C unless otherwise noted)

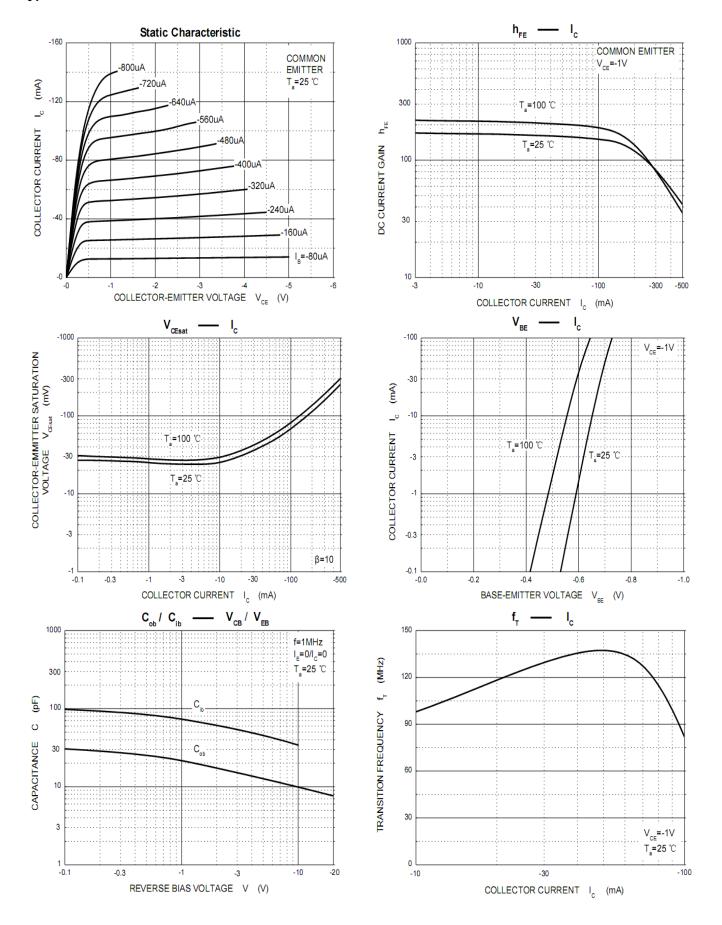
Symbol	Parameter	Value	Unit
Vсво	Collector-Base Voltage	-80	V
Vceo	Collector-Emitter Voltage	-80	V
Vево	Y _{EBO} Emitter-Base Voltage		V
lc	Collector Current	-500	mA
Pc	Collector Power Dissipation	225	mW
Roja	Thermal Resistance From Junction To Ambient	555	°C/W
TJ,Tstg	Operation Junction and Storage Temperature Range	55~,±150 l	

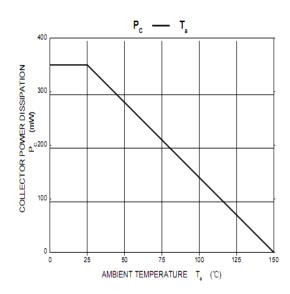
Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100μA, I _E =0	-80		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-1mA, I _B =0	-80		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-100μA, I _C =0	-4		V
Collector cut-off current	I _{CBO}	V _{CB} =-80V, I _E =0		-0.1	μA
Collector cut-off current	I _{CEO}	V _{CE} =-60V, I _B =0		-1	μA
Emitter-base breakdown voltage	I _{EBO}	V _{EB} =-4V, I _C =0		-0.1	μA
	h _{FE(1)}	V _{CE} =-1V, I _C =-10mA	100	400	
DC current gain	h _{FE(2)}	V _{CE} =-1V, I _C =-100mA	100		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-100mA, I _B =-10mA		-0.25	V
Base-emitter voltage	V_{BE}	V _{CE} =-1V, I _C =-100mA		-1.2	V
Transition frequency	f⊤	V _{CE} =-1V,I _C =-100mA, f=100MHz	50		MHz

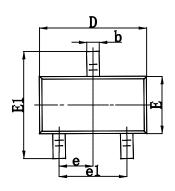


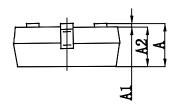
Typical Characteristics

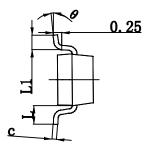




SOT-23 Package Outline Dimensions







Symbol	Dimensions In Millimeters		Dimensions In Inches		
Symbol	Min	Max	Min	Max	
Α	0.900	1.150	0.035	0.045	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.050	0.035	0.041	
b	0.300	0.500	0.012	0.020	
С	0.080	0.150	0.003	0.006	
D	2.800	3.000	0.110	0.118	
E	1.200	1.400	0.047	0.055	
E1	2.250	2.550	0.089	0.100	
е	0.950 TYP		0.037 TYP		
e1	1.800	2.000	0.071	0.079	
L	0.550 REF		0.022 REF		
L1	0.300	0.500	0.012	0.020	
θ	0°	8°	0°	8°	



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