

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- General Purpose Amplifier Applications

MARKING

2GM

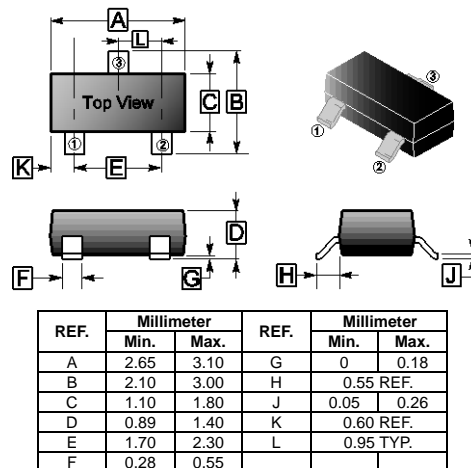
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

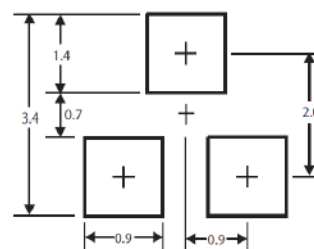
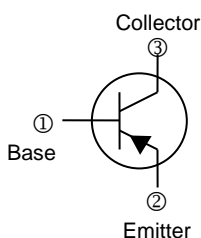
ORDER INFORMATION

Part Number	Type
MMBTA56-C	Lead (Pb)-free and Halogen-free

SOT-23



Mounting Pad Layout



*Dimensions in millimeters

MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V _{CB0}	-80	V
Collector-Emitter Voltage	V _{CEO}	-80	
Emitter-Base Voltage	V _{EBO}	-4	
Collector Current-Continuous	I _C	-500	mA
Collector Power Dissipation	P _C	225	mW
Thermal Resistance from Junction-Ambient	R _{θJA}	555	°C/W
Junction, Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	V _{(BR)CBO}	-80	-	-	V	I _C = -100μA, I _E = 0
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	-80	-	-		I _C = -1mA, I _B = 0
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	-4	-	-		I _E = -100μA, I _C = 0
Collector Cut-Off Current	I _{CB0}	-	-	-0.1	μA	V _{CB} = -80V, I _E = 0
Collector Cut-Off Current	I _{CEO}	-	-	-0.1		V _{CE} = -60V, I _B = 0
Emitter Cut-Off Current	I _{EBO}	-	-	-0.1		V _{EB} = -4V, I _C = 0
DC Current Gain	h _{FE}	100	-	400		V _{CE} = -1V, I _C = -10mA
		100	-	-		V _{CE} = -1V, I _C = -100mA
Collector-Emitter Saturation Voltage	V _{CE(sat)}	-	-	-0.25	V	I _C = -100mA, I _B = -10mA
Base-Emitter Saturation Voltage	V _{BE(sat)}	-	-	-1.2	V	V _{CE} = -1V, I _C = -100mA
Transition Frequency	f _T	50	-	-	MHz	V _{CE} = -1V, I _C = -100mA, f = 100MHz