

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

FEATURES

- Small Package
- Complementary to MMBT3904M-C

MARKING

3N

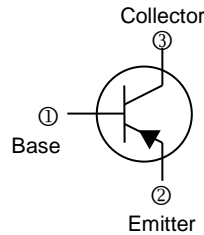
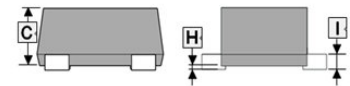
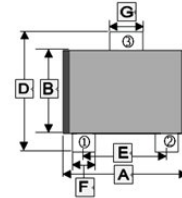
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-723	8K	7 inch

ORDER INFORMATION

Part Number	Type
MMBT3906M-C	Lead (Pb)-free and Halogen-free

SOT-723



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.15	1.25	F	0.17	0.27
B	0.75	0.85	G	0.27	0.37
C	-	0.50	H	0	0.05
D	1.15	1.25	I	-	0.15
E	0.80 TYP.				

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

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V _{CB0}	-40	V
Collector-Emitter Voltage	V _{CEO}	-40	V
Emitter-Base Voltage	V _{EBO}	-5	V
Continuous Collector Current	I _C	-0.2	A
Power Dissipation	P _C	100	mW
Thermal Resistance from Junction-Ambient	R _{θJA}	1250	°C/W
Junction, Storage Temperature	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}	-40	-	-	V	I _C = -10μA, I _E =0
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	-40	-	-	V	I _C = -1mA, I _B =0
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	-5	-	-	V	I _E = -10μA, I _C =0
Collector Cut-off Current	I _{CBO}	-	-	-100	nA	V _{CB} = -40V, I _E =0
Collector Cut-off Current	I _{CEX}	-	-	-50	nA	V _{CE} = -30V, V _{BE(off)} = -3V
Emitter Cut-off Current	I _{EBO}	-	-	-100	nA	V _{EB} =5V, I _C =0
DC Current Gain	h _{FE}	30	-	-		V _{CE} = -2V, I _C = -100mA
		60	-	-		V _{CE} = -1V, I _C = -50mA
		100	-	300		V _{CE} = -1V, I _C = -10mA
Collector-Emitter Saturation Voltage	V _{CE(sat)}	-	-	-0.3	V	I _C = -50mA, I _B = -5mA
Base-Emitter Saturation Voltage	V _{BE(sat)}	-	-	-0.95	V	I _C = -50mA, I _B = -5mA
Transition Frequency	f _T	-	300	-	MHz	V _{CE} = -20V, I _C = -10mA, f=100MHz
Delay Time	t _d	-	35	-	nS	V _{CC} = -3V, V _{BE(off)} = -0.5V I _C = -10mA, I _{B1} =I _{B2} = -1mA
Rise Time	t _r	-	35	-		
Storage Time	t _s	-	225	-		
Fall Time	t _f	-	75	-		

CHARACTERISTIC CURVES

Static Characteristic

