

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

FEATURES

- High voltage Transistor

MARKING

2D

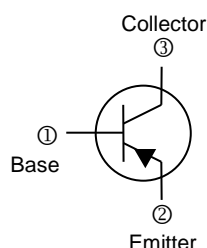
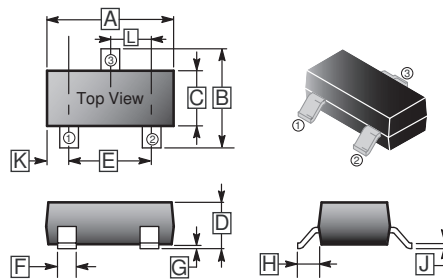
PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

ORDER INFORMATION

Part Number	Type
MMBTA92	Lead (Pb)-free
MMBTA92-C	Lead (Pb)-free and Halogen-free

SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.10	G	0	0.18
B	2.10	2.95	H	0.55	REF.
C	1.20	1.7	J	0.08	0.20
D	0.89	1.3	K	0.6	REF.
E	1.70	2.3	L	0.95	BSC.
F	0.30	0.50			

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

Parameter	Symbol	Ratings	Unit
Collector-Emitter Voltage	V _{CEO}	-300	V
Collector-Base Voltage	V _{CBO}	-300	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current-Continuous	I _C	-200	mA
Collector Current -Pulsed	I _{CM}	-500	mA
Collector Power Dissipation	P _D	300	mW
Thermal Resistance, Junction-Ambient	R _{θJA}	417	°C/W
Junction, Storage Temperature	T _J , T _{STG}	150,-55~150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	-300	-	-	V	I _C = -1mA, I _B = 0
Collector-Base Breakdown Voltage	V _{(BR)CBO}	-300	-	-	V	I _C = -100μA, I _E = 0
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	-5	-	-	V	I _E = -100μA, I _C = 0
Collector Cut-off Current	I _{CBO}	-	-	-0.25	μA	V _{CB} = -200V, I _E = 0
Emitter Cut-off Current	I _{EBO}	-	-	-0.1	μA	V _{EB} = -5V, I _C = 0
DC Current Gain	h _{FE}	60	-	-		I _C = -1mA, V _{CE} = -10V
		100	-	200		I _C = -10mA, V _{CE} = -10V
		60	-	-		I _C = -30mA, V _{CE} = -10V
Collector-Emitter Saturation Voltage	V _{CE(sat)}	-	-	-0.2	V	I _C = -20mA, I _B = -2mA
Base-Emitter Saturation Voltage	V _{BE(sat)}	-	-	-0.9	V	I _C = -20mA, I _B = -2mA
Current-Gain-Bandwidth Product	f _T	50	-	-	MHz	I _C = -10mA, V _{CE} = -20V, f = 30MHz

TYPICAL CHARACTERISTICS

