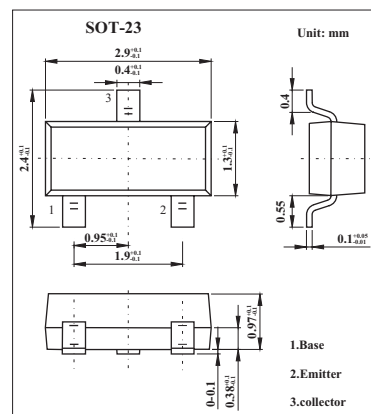


MMBTA70

■ Features

- General Purpose Transistor



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-emitter voltage	V _{CEO}	-40	V
Emitter-base voltage	V _{EBO}	-4	V
Collector current	I _C	-100	mA
Total Device Dissipation FR-5 Board (* 1) @T _A = 25°C Derate above 25°C	P _D	225 1.8	mW mW/°C
Thermal Resistance, Junction-to-Ambient	R _{θJA}	556	°C/W
Total Device Dissipation Alumina Substrate, (* 2) @T _A = 25°C Derate above 25°C	P _D	300 2.4	mW mW/°C
Thermal Resistance, Junction-to-Ambient	R _{θJA}	417	°C/W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

* 1. FR-5 = 1.0 □ 0.75 □ 0.062 in.

* 2. Alumina = 0.4 □ 0.3 □ 0.024 in. 99.5% alumina.

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1.0 mA, I _B = 0	-40			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -100 μA, I _C = 0	-4.0			V
Collector cutoff current	I _{CBO}	V _{CB} = -30 V, I _E = 0			-100	nA
DC current gain	H _{FE}	I _C = -5.0 mA, V _{CE} = -10 V	40		400	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -10 mA, I _B = -1.0 mA			-0.25	V
Current-gain-bandwidth product	f _r	I _C = -5.0 mA, V _{CE} = -10 V, f = 100 MHz	125			MHz
Output capacitance	C _{obo}	V _{CB} = -10 V, I _E = 0, f = 1.0 MHz			4.0	pF

■ Marking

Marking	M2C
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