



SOT-23 Plastic-Encapsulate Transistors

MMBT4403 TRANSISTOR (PNP)

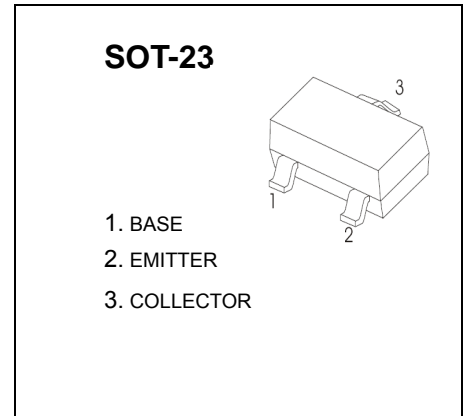
FEATURES

Switching transistor

MARKING : 2T

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	-40	V
V _{CEO}	Collector-Emitter Voltage	-40	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-0.6	A
P _C	Collector Power Dissipation	0.3	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C



ELECTRICAL CHARACTERISTICS (T_a=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	-40		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, I _B =0	-40		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-100μA, I _C =0	-5		V
Collector cut-off current	I _{CBO}	V _{CB} =-35V, I _E =0		-0.1	μA
Collector cut-off current	I _{CEO}	V _{CE} =-35 V, I _B =0		-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-4V, I _C =0		-0.1	μA
DC current gain	h _{FE}	V _{CE} =-2V, I _C = -150mA	100	300	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-150mA, I _B =-15mA		-0.4	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =- 150mA, I _B =-15mA		-0.95	V
Transition frequency	f _T	V _{CE} = -10V, I _C = -20mA f = 100MHz	200		MHz
Delay time	t _d	V _{CC} =-30V, V _{EB} =-2V, I _C =-150mA, I _{B1} =-15mA		15	ns
Rise time	t _r			20	ns
Storage time	t _s	V _{CC} =-30V, I _C =-150mA.		225	ns
Fall time	t _f	I _{B1} = I _{B2} =-15mA		30	ns

Typical Characteristics

MMBT4403

