TRANSISTOR (PNP)

FEATURES

Switching transistor

MARKING ： MMBT4403=2T

SOT-23

1. BASE
2. EMITTER
3. COLLECTOR

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
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	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ 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

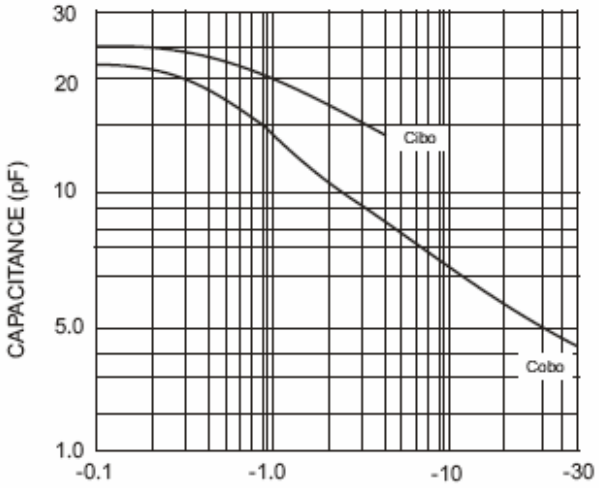

Fig. 1 Typical Capacitance

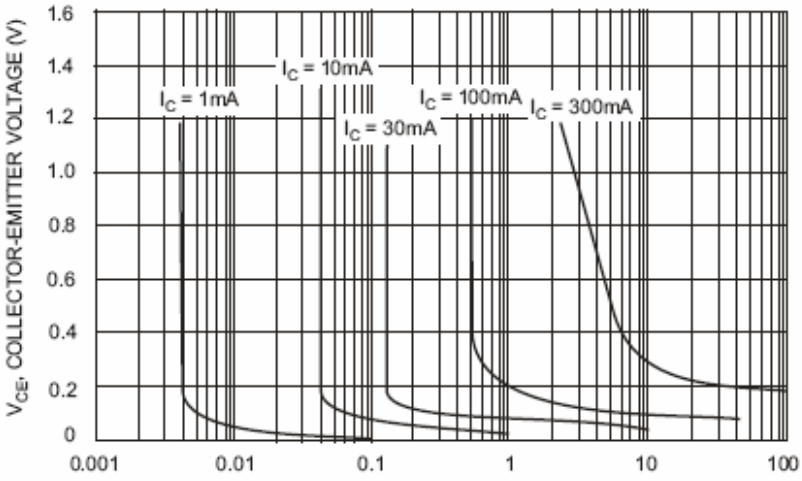

Fig. 2 Typical Collector Saturation Region

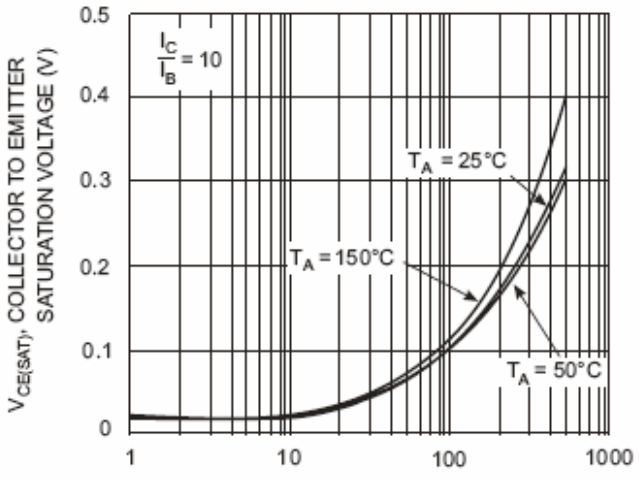

Fig. 3 Collector Emitter Saturation Voltage vs. Collector Current

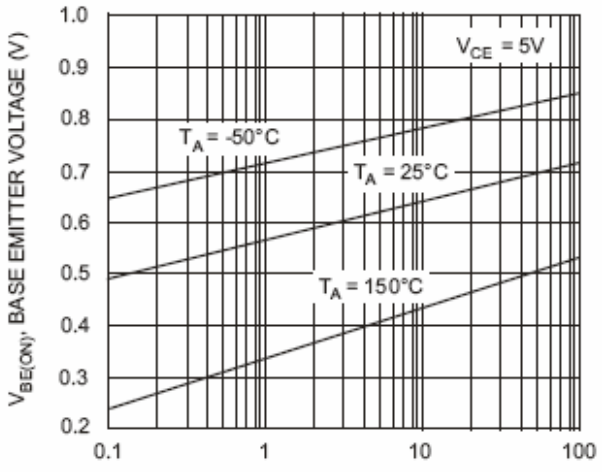

Fig. 4 Base-Emitter Voltage vs. Collector Current

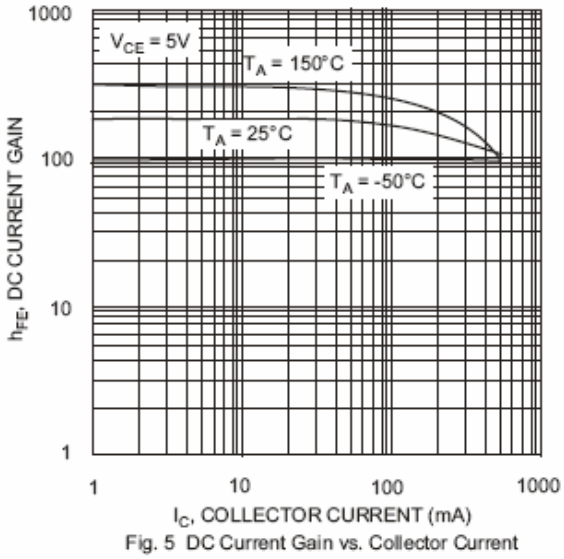

Fig. 5 DC Current Gain vs. Collector Current

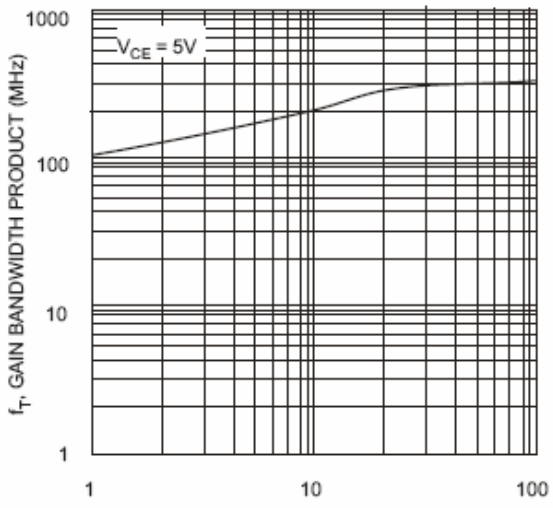

Fig. 6 Gain Bandwidth Product vs. Collector Current

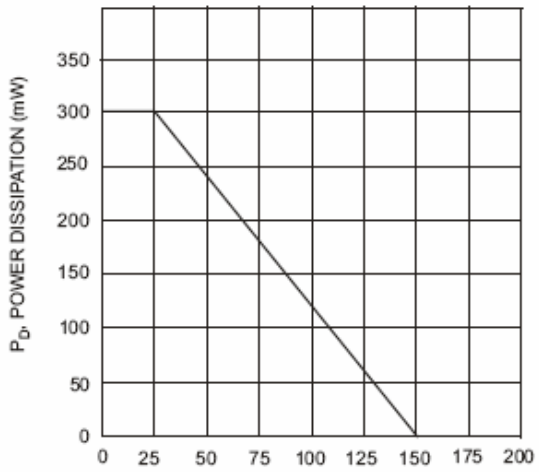

Fig. 7, Max Power Dissipation vs Ambient Temperature