

FEATURES

Complementary to MMBT5551

Ideal for medium power amplification and switching

MMBT5401 (PNP)

MARKING: 2L

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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	-160	V
Collector-Emitter Voltage	V _{CEO}	-150	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current -Continuous	I _C	-0.6	A
Collector Power Dissipation	P _C	0.3	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{CBO}	I _C = -100µA, I _E =0	-160		V
Collector-emitter breakdown voltage	V _{CEO}	I _C = -1mA, I _B =0	-150		V
Emitter-base breakdown voltage	V _{EBO}	I _E = -10µA, I _C =0	-5		V
Collector cut-off current	I _{CB}	V _{CB} =-120 V , I _E =0		-0.1	µA
Emitter cut-off current	I _{EB}	V _{EB} =-4V , I _C =0		-0.1	µA
DC current gain	h _{FE1}	V _{CE} = -5V, I _C = -1mA	80		
	h _{FE2}	V _{CE} = -5V, I _C =-10mA	100	300	
	h _{FE3}	V _{CE} = -5V, I _C =-50mA	50		
Collector-emitter saturation voltage	V _{CESat}	I _C =-50 mA, I _B = -5mA		-0.5	V
Base-emitter saturation voltage	V _{BESat}	I _C = -50 mA, I _B =		-1	V
Transition frequency	f _T	V _{CE} = -5V, I _C = -10mA	100		MHz

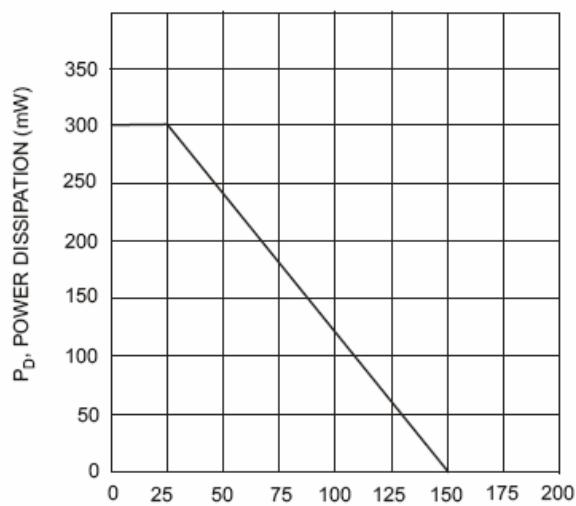
MMBT5401 Typical Characteristics


Fig. 1, Max Power Dissipation vs.
Ambient Temperature

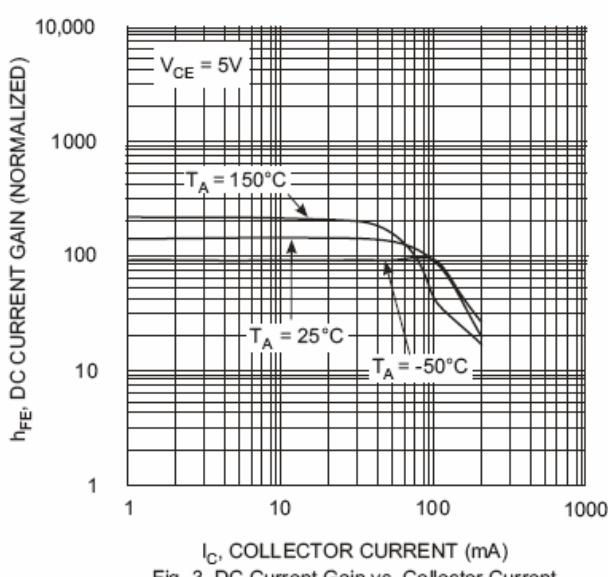


Fig. 3, DC Current Gain vs. Collector Current

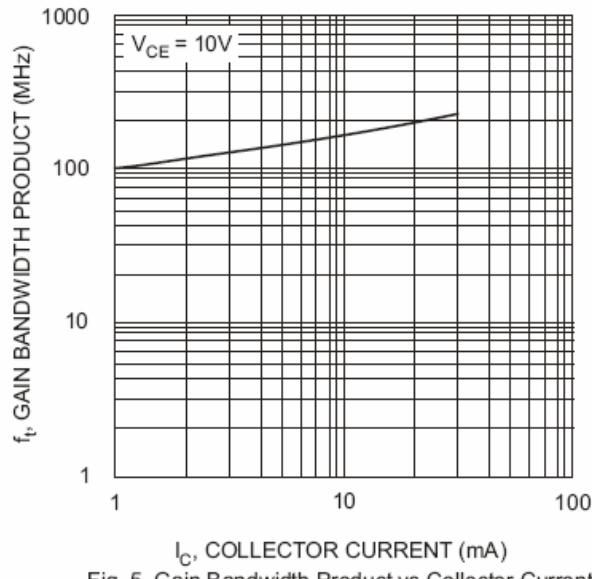


Fig. 5, Gain Bandwidth Product vs Collector Current

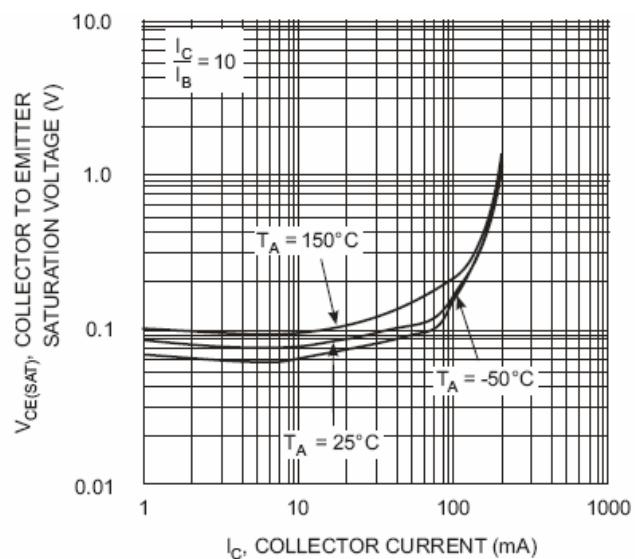


Fig. 2, Collector Emitter Saturation Voltage
vs. Collector Current

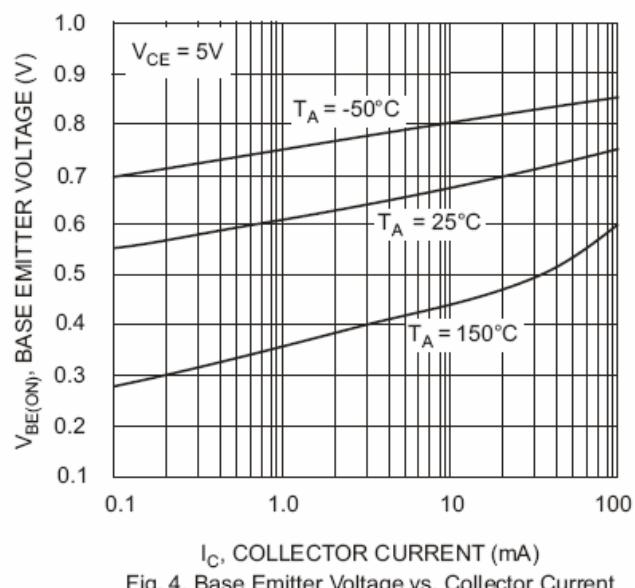


Fig. 4, Base Emitter Voltage vs. Collector Current