MMBT5401 TRANSISTOR (PNP)

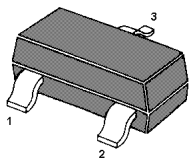
FEATURES

Complementary to MMBT5551

Ideal for medium power amplification and switching

MARKING: 2L

SOT-23



1. BASE
2. EMITTER
3. COLLECTOR

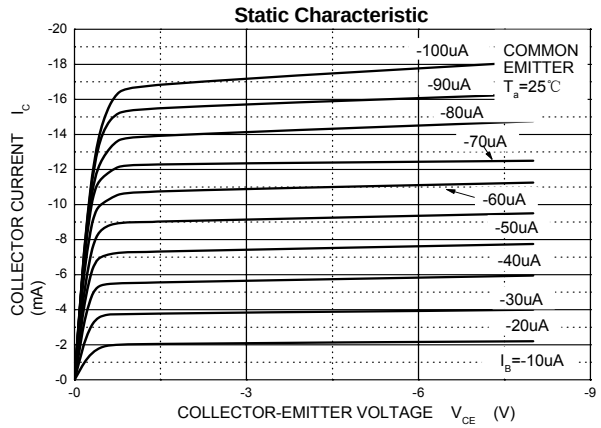
MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

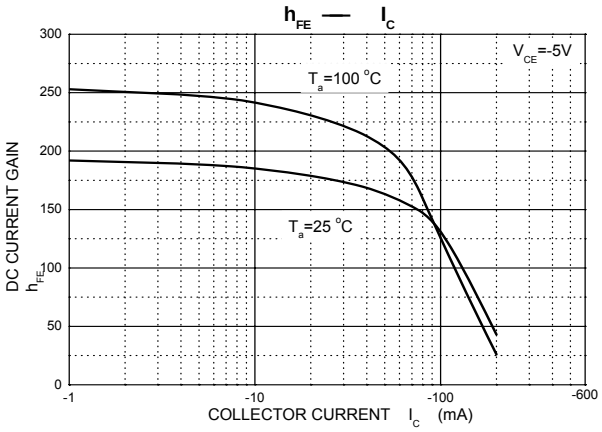
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.6	A
P_C	Collector Power Dissipation	0.3	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

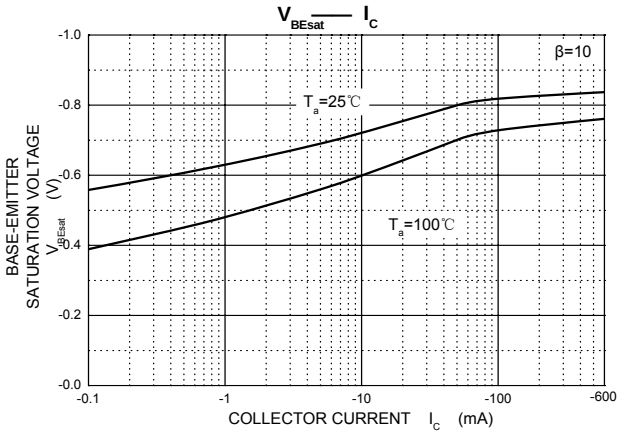
ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

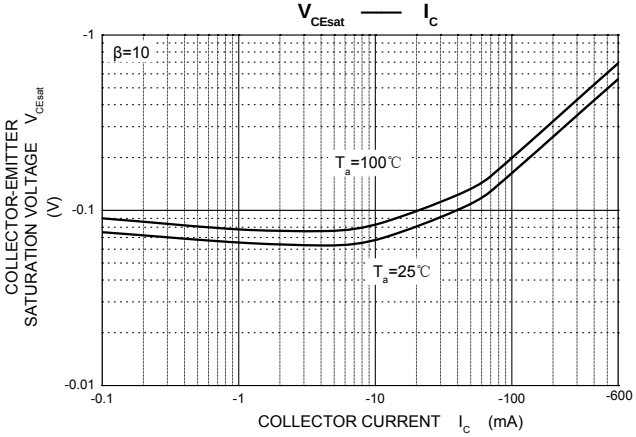
Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -100μA, I_E=0	-160		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= -1mA, I_B=0	-150		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= -10μA, I_C=0	-5		V
Collector cut-off current	I_{CBO}	V_{CB}=-120 V, I_E=0		-0.1	μA
Emitter cut-off current	I_{EBO}	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_{CE}(sat)	I_C=-50 mA, I_B= -5mA		-0.5	V
Base-emitter saturation voltage	V_{BE}(sat)	I_C= -50 mA, I_B= -5mA		-1	V
Transition frequency	f_T	V_{CE}= -5V, I_C= -10mA	100		MHz

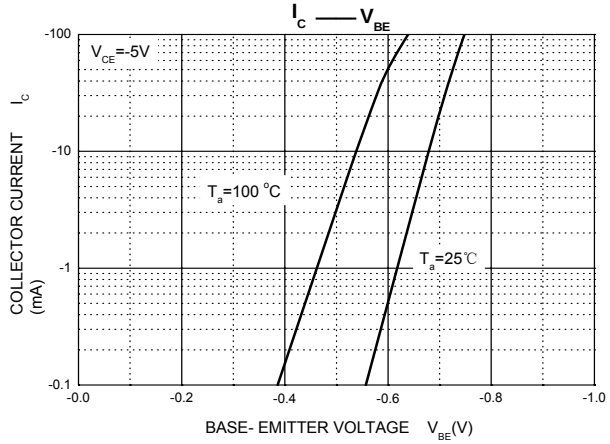
Typical Characteristics

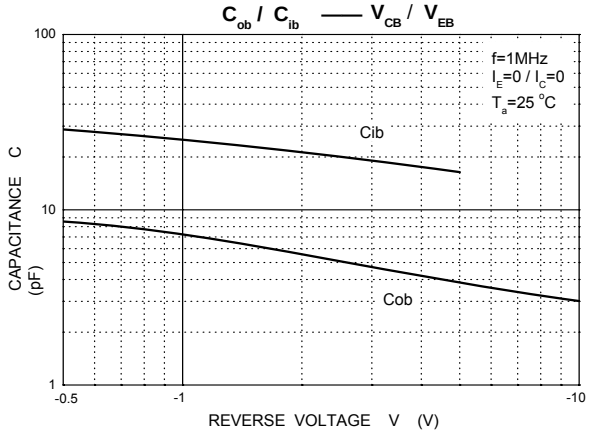


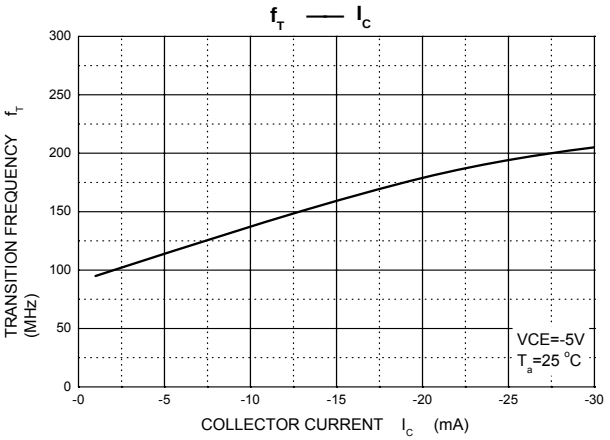


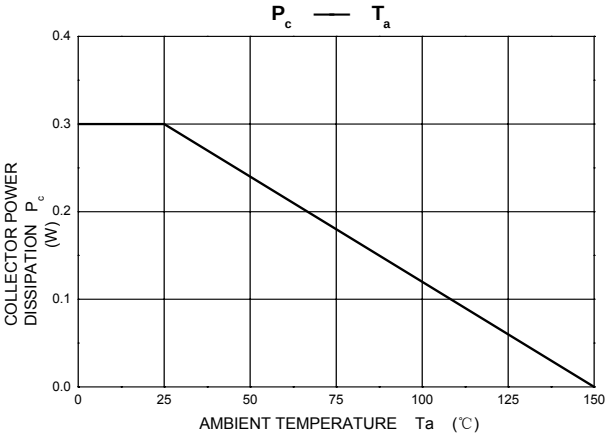






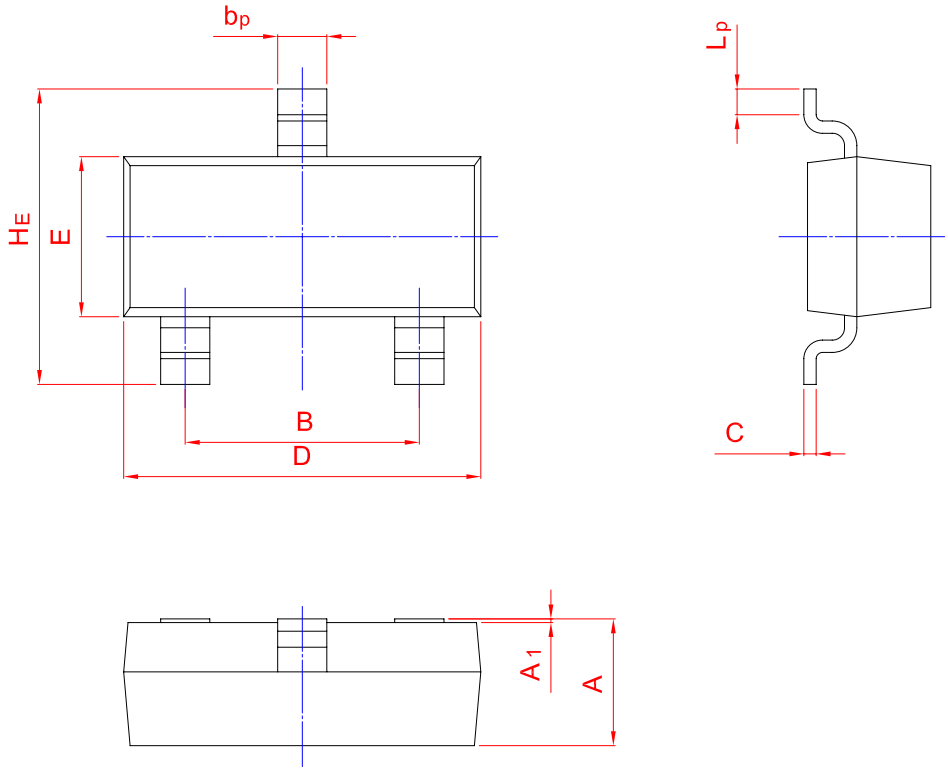






PACKAGE OUTLINE

Plastic surface mounted package; 3 leads **SOT-23**



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20