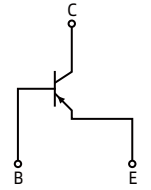


Features

- High Breakdown Voltage.
- Ideal for Medium Power Amplification and Switching.
- Complementary to MMBT5551.



SOT23



Equivalent Circuit

Absolute Maximum Ratings (TA=25°C)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-160	V
V _{CE0}	Collector-Emitter Voltage	-150	V
V _{EB0}	Emitter-Base Voltage	-5	V
I _c	Collector Current	-0.6	A
P _c	Collector Power Dissipation	300	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	400	°C/W
T _J , T _{stg}	Operation Junction And Storage Temperature Range	-55 ~ +150	°C/W

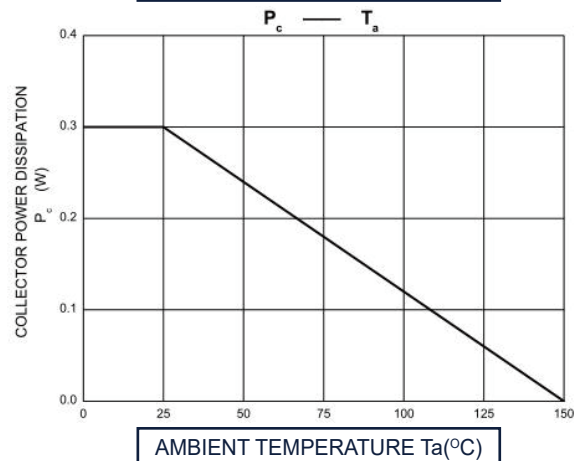
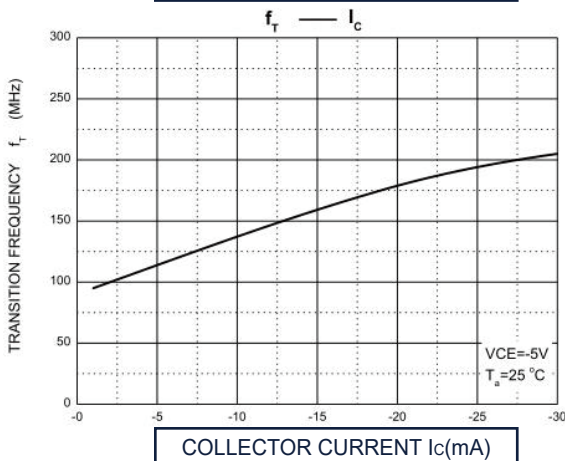
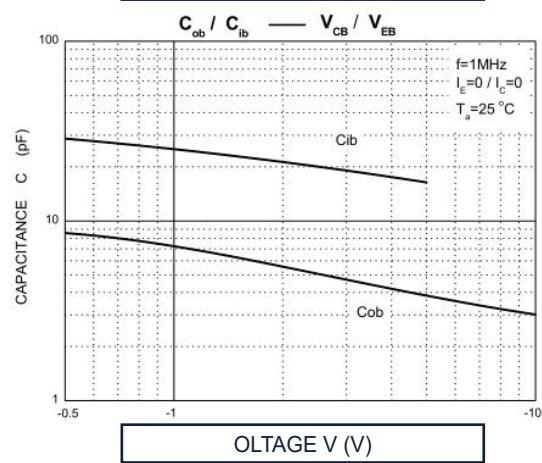
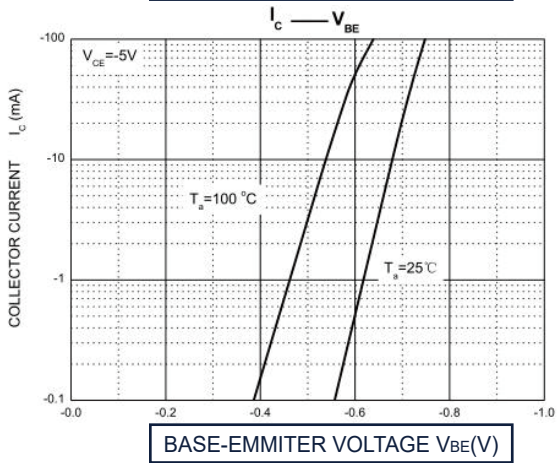
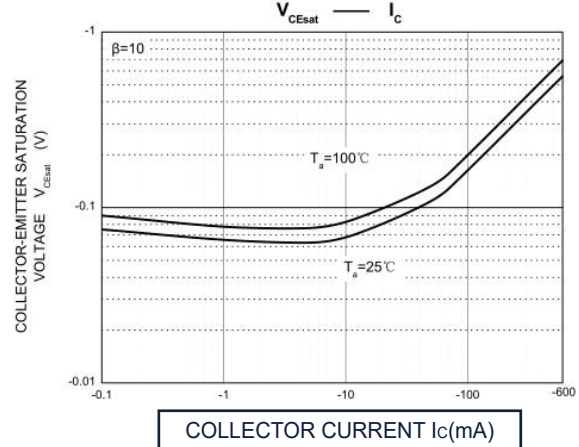
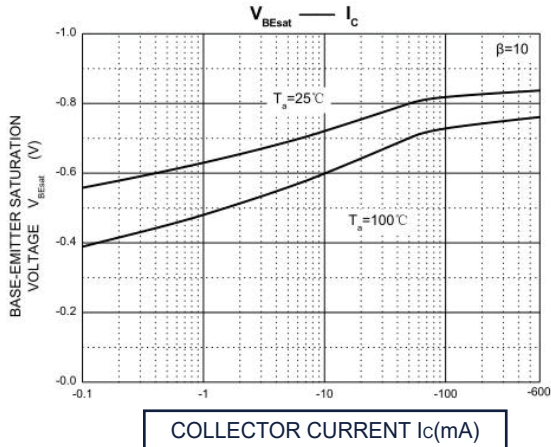
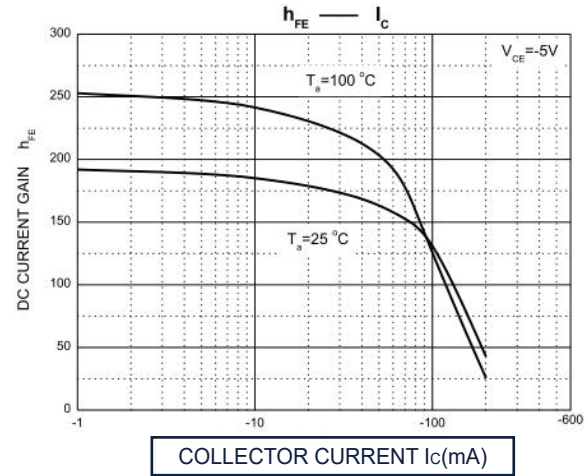
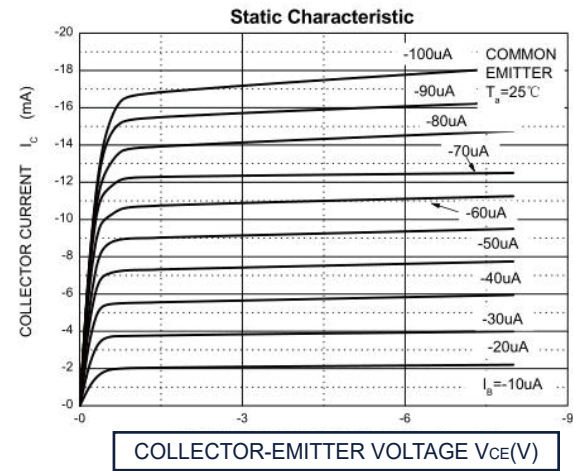
Electrical Characteristics (TA=25°C unless otherwise specified)

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
V _{(BR)CB0}	Collector-base breakdown voltage	I _c =-100μA, I _E =0	-160			V
V _{(BR)CE0}	Collector-emitter breakdown voltage	I _c =-1mA, I _B =0	-150			V
V _{(BR)EB0}	Emitter-base breakdown voltage	I _E =-10μA, I _c =0	-5			V
I _{CB0}	Collector cut-off current	V _{CB} =-120V, I _E =0			-100	nA
I _{EB0}	Emitter cut-off current	V _{EB} =-4V, I _c =0			-100	nA
h _{FE(1)}	DC current gain(1)	V _{CE} =-5V, I _c =-1mA	80			
h _{FE(2)}	DC current gain(2)	V _{CE} =-5V, I _c =-10mA	100		300	
h _{FE(3)}	DC current gain(3)	V _{CE} =-5V, I _c =-50mA	50			
V _{CE(sat)1}	Collector-emitter saturation voltage	I _c =-10mA, I _B =-1mA			-0.2	V
V _{BE(sat)1}	Base-emitter saturation voltage				-1	V
V _{CE(sat)2}	Collector-emitter saturation voltage	I _c =-50mA, I _B =-5mA			-0.5	V
V _{BE(sat)2}	Base-emitter saturation voltage				-0.1	V
f _T	Transition frequency	V _{CE} =-5V, I _c =-10mA, f=30MHz	100			MHz

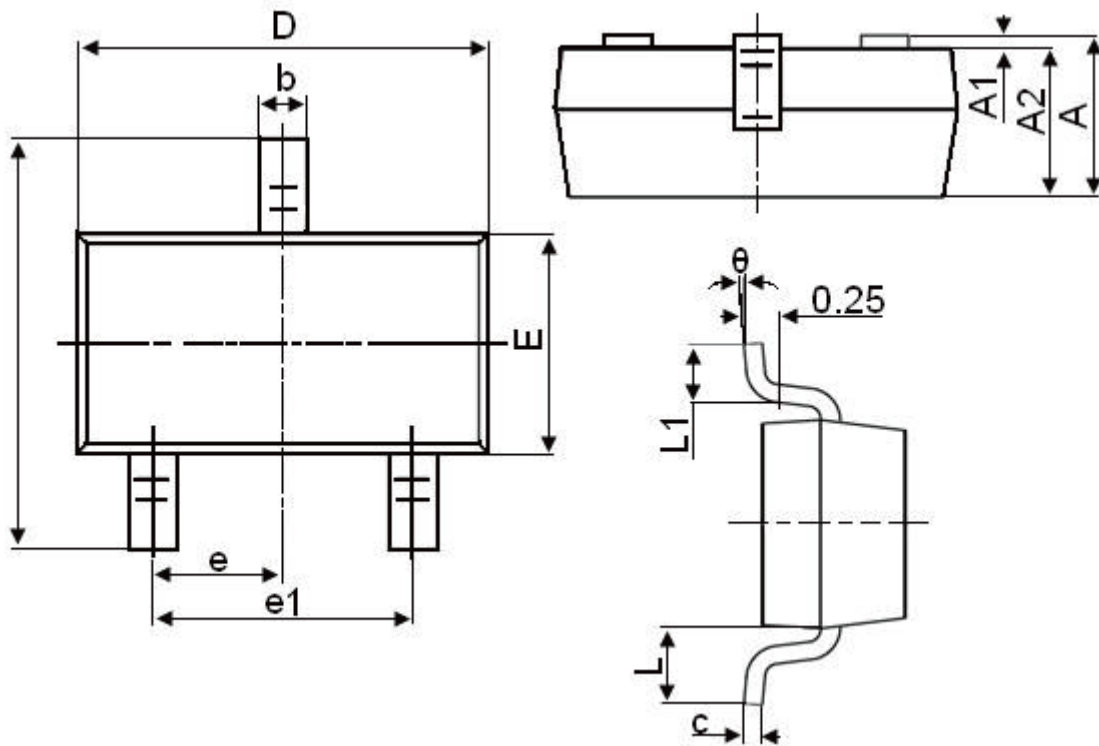
Ordering information

Product ID	Pack	Naming rule	Marking	h _{FE(1)}	Qty(PCS)
MMBT5401	SOT23	<div style="border: 1px solid black; padding: 5px; display: inline-block;">MMBT5401</div> <small>产品名称 product name</small>	2L	100 ~ 300	3000

Typical Characteristics



SOT23 Package Outline Dimensions



Symbol	Dimensions in Millimeters	
	mm	
	Min	Max
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°