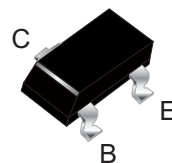


FEATURES

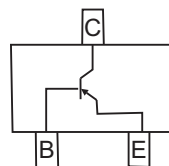
- Epoxy meets UL-94 V-0 flammability rating
- Complementary to MMBT5551
- Power dissipation of 300mW
- High stability and high Reliability

SOT-23



MECHANICAL DATA

- Case:SOT-23(TO-236)
- Terminals:Plated solderable per MIL-STD-750,method 2026
- Mounting Position: Any
- Marking:2L



MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$ Unless otherwise specified)

Parameter	Symbol	Unit	Value
Collector-Emitter Voltage	V_{CEO}	V	-150
Collector-Base Voltage	V_{CBO}	V	-160
Emitter-Base Voltage	V_{EBO}	V	-5
Collector Current, Continuous	I_C	mA	-600
Collector Power Dissipation	P_D	mW	300
Operation Junction Temperature	T_J	$^{\circ}\text{C}$	-55 to +150
Storage Temperature	T_{STG}	$^{\circ}\text{C}$	-55 to +150
Thermal resistance From junction to ambient	$R_{\theta JA}$	$^{\circ}\text{C}/\text{W}$	416

MMBT5401

ELECTRICAL CHARACTERISTICS(T_A=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	V	I _C =-1.0mA, I _B =0	-150	---
Collector-Base Breakdown Voltage	V _{(BR)CBO}	V	I _C =-100μA, I _E =0	-160	---
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	V	I _E =-10μA, I _C =0	-5	---
Collector cut-off Current	I _{CBO}	nA	V _{CB} =-120V, I _E =0	---	-100
Collector cut-off Current	I _{CEO}	nA	V _{CE} =20V, I _B =0	---	---
Emitter cut-off Current	I _{EBO}	nA	V _{EB} =-4V, I _C =0	---	-100
DC Current Gain	h _{FE(1)}		I _C =-1mA, V _{CE} =-5V	80	---
	h _{FE(2)}		I _C =-10mA, V _{CE} =-5V	100	300
	h _{FE(3)}		I _C =-50mA, V _{CE} =-5V	30	---
Collector-Emitter Saturation Voltage	V _{CE(sat)}	V	I _C =-10mA, I _B =-1mA	---	-0.2
			I _C =-50mA, I _B =-5mA	---	-0.5
Base-Emitter Saturation Voltage	V _{BE(sat)}	V	I _C =-10mA, I _B =-1mA	---	-1.0
			I _C =-50mA, I _B =-5mA	---	-1.0
Output Capacitance	C _{ob}	pF	V _{CB} =6V, f=1.0MHz, I _E =0	---	---
Input Capacitance	C _{ib}	pF	V _{EB} =0.5V, f=1.0MHz, I _C =0	---	---
Current Gain-Bandwidth Product	f _T	MHz	I _C =10mA, V _{CE} =-5V f=30MHz	100	---
Noise Figure	NF	dB	V _{CE} =5.0V, f=1.0kHz, I _C =100μA, R _S =1.0K	---	---

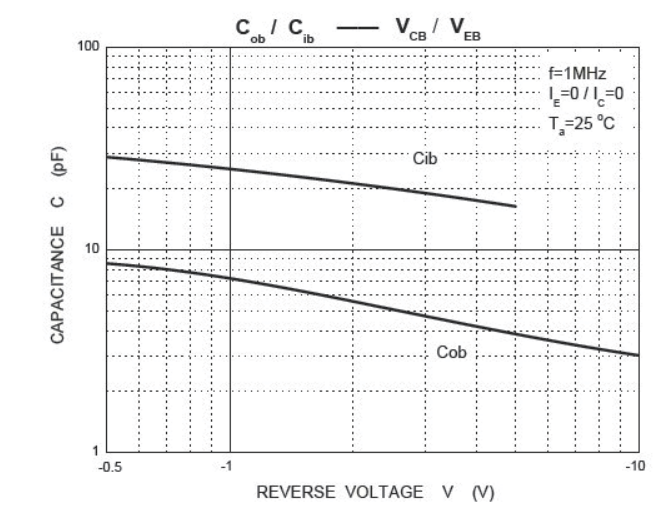
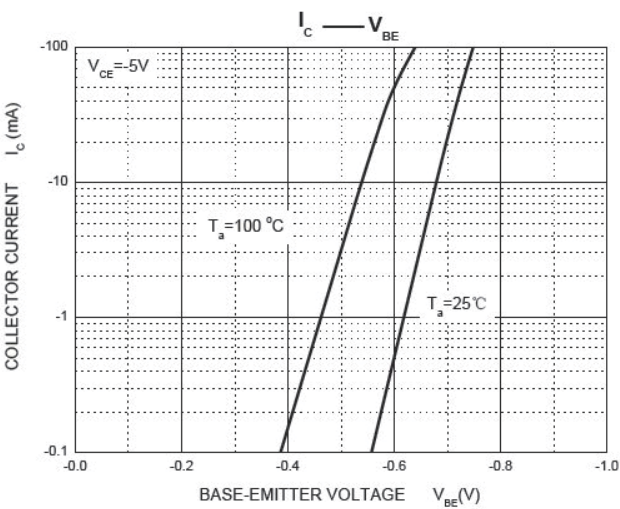
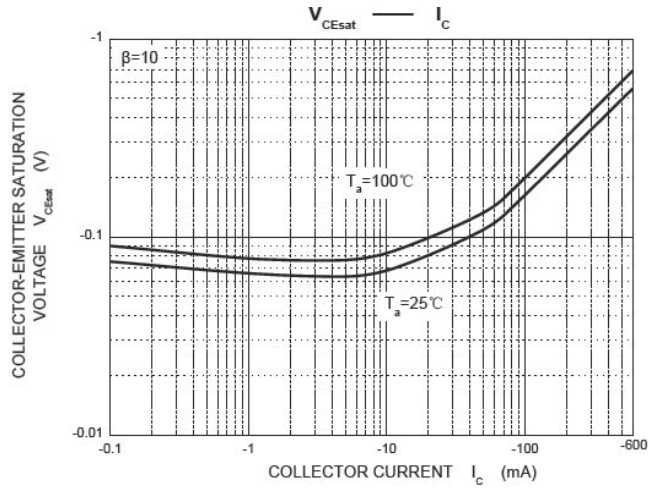
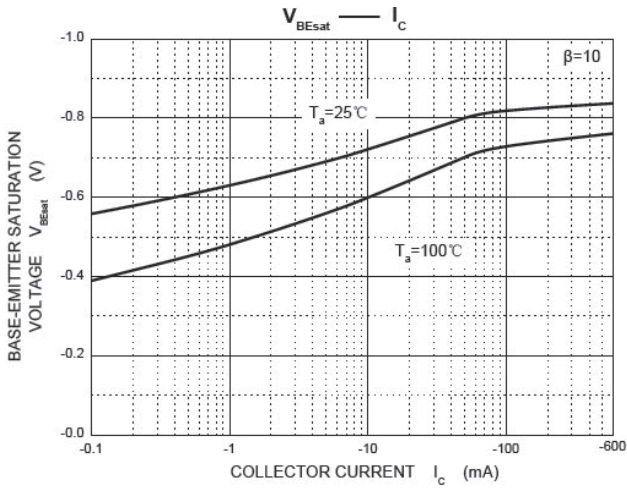
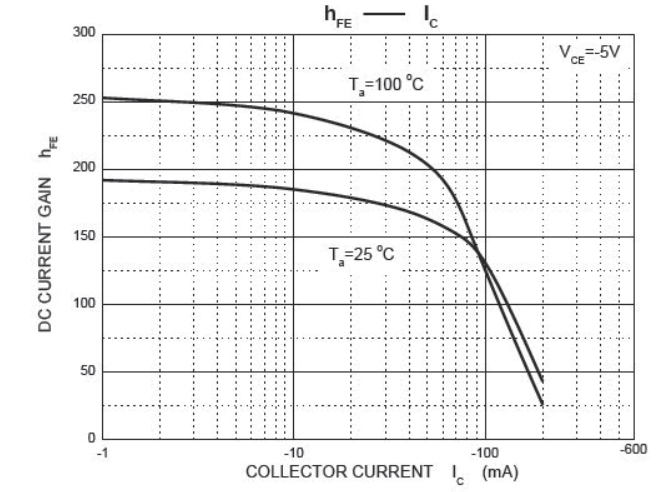
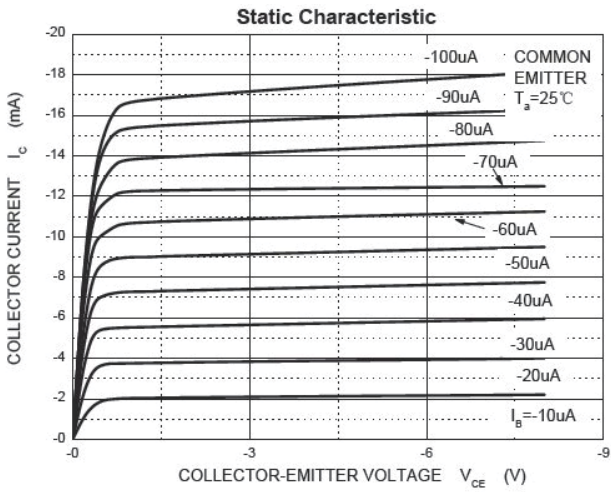
CLASSIFICATION OF h_{FE(2)}

h _{FE}	100-300	
Rank	L	H
Range	100-200	200-300

AVAILABLE PACK INFORMATION

Product code	Pack	Reel Size (mm)	Quantity (Pcs/reel)	Quantity (pcs/box)	Quantity (pcs/carton)
MMBT5401	T/R	Φ180	3K	30K	120K

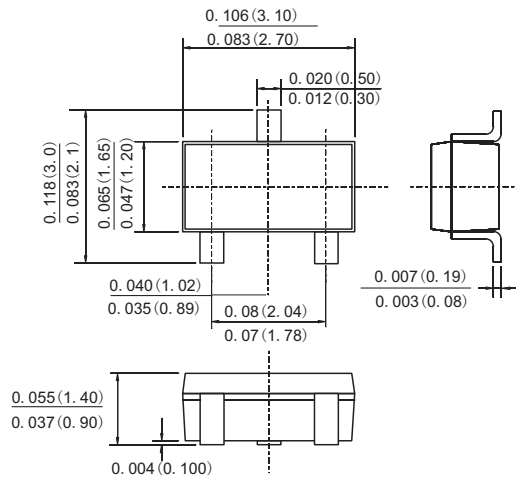
Characteristics(Typical)



MMBT5401

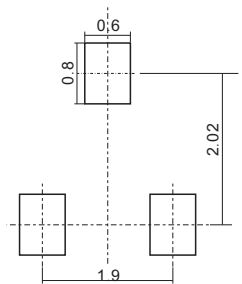
Outline Dimensions

SOT-23



Dimensions in inches and (millimeters)

Suggested pad layout



Dimensions in millimeters

Friendship Reminder

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