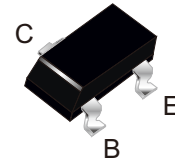


FEATURES

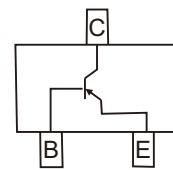
- Epoxy meets UL-94 V-0 flammability rating
- Power Dissipation of 300mW
- High Stability and High Reliability

SOT-23



MECHANICAL DATA

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



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

Parameter	Symbol	Unit	Value
Collector-Emitter Voltage	V_{CE0}	V	-40
Collector-Base Voltage	V_{CB0}	V	-40
Emitter-Base Voltage	V_{EB0}	V	-5.0
Collector Current, Continuous	I_c	mA	-600
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	$R_{\theta JA}$	$^{\circ}\text{C}/\text{W}$	417

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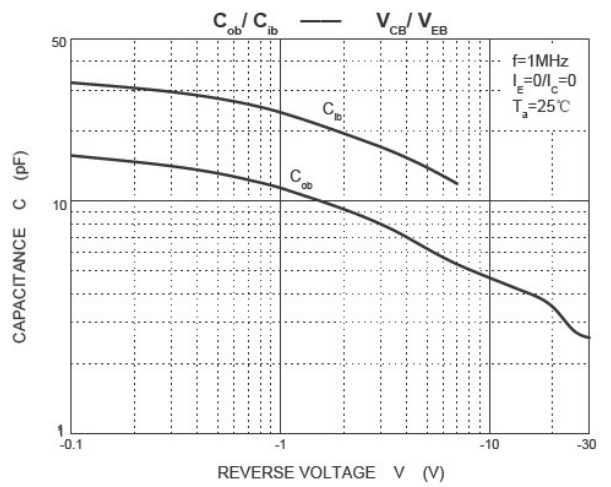
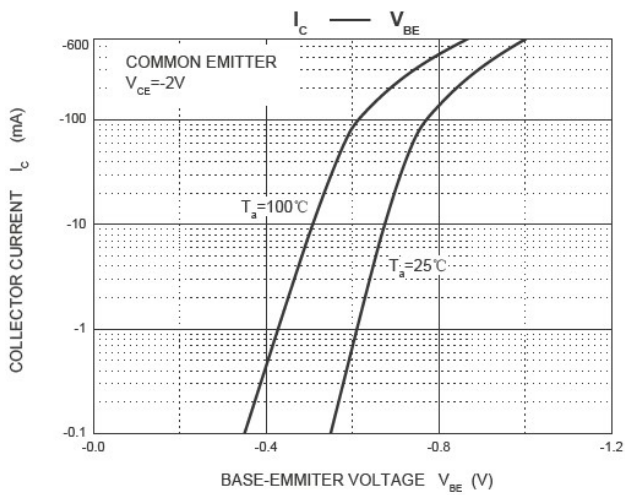
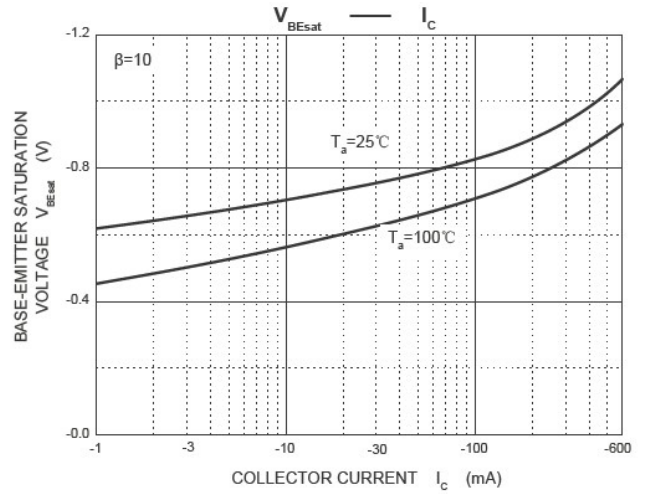
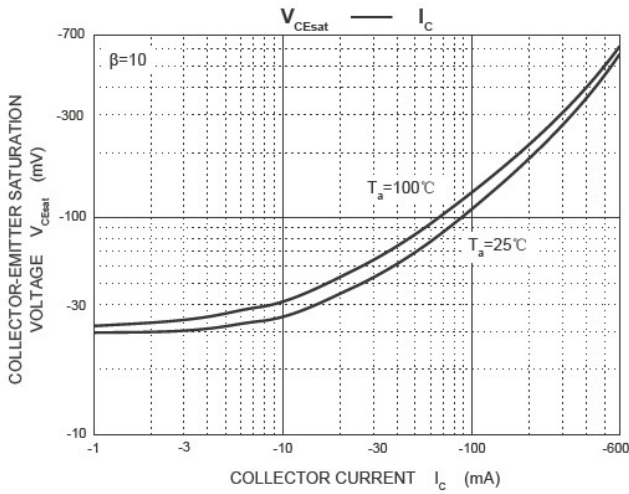
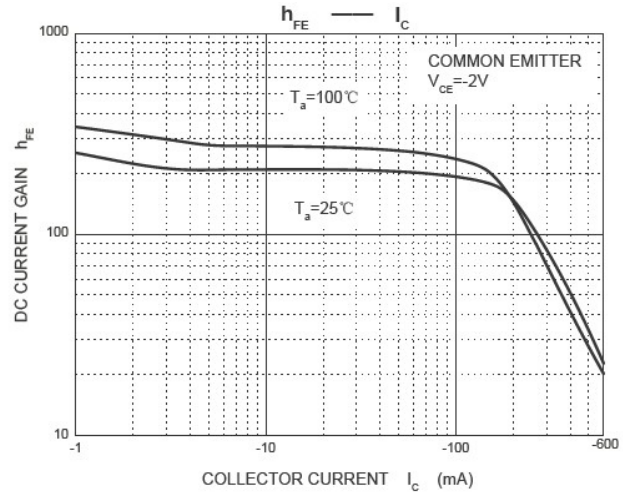
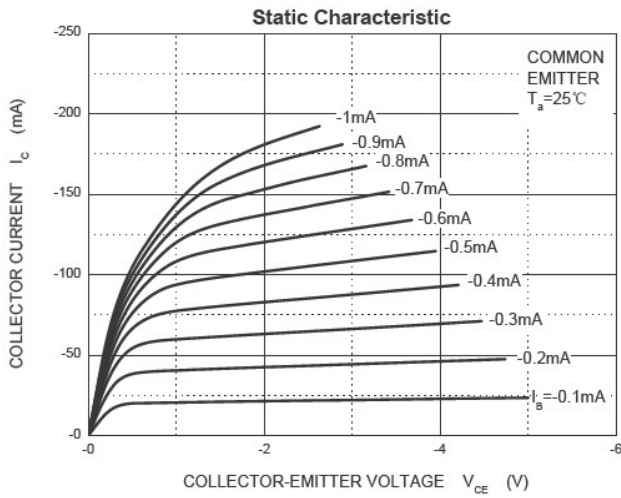
ELECTRICAL CHARACTERISTICS(T_A=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	V	I _C =-1mA, I _B =0	-40	---
Collector-Base Breakdown Voltage	V _{(BR)CBO}	V	I _C =-100μA, I _E =0	-40	---
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	V	I _E =-100μA, I _C =0	-5.0	---
Collector cut-off Current	I _{CBO}	nA	V _{CB} =-35V, I _E =0	---	-100
Collector cut-off Current	I _{CEX}	nA	V _{CE} =-35V, V _{EB(off)} =-0.4V	---	-100
Emitter cut-off Current	I _{EBO}	nA	V _{EB} =-1V, I _C =0	---	-100
DC Current Gain	h _{FE(1)}		I _C =-0.1mA, V _{CE} =-1V	30	---
	h _{FE(2)}		I _C =-1mA, V _{CE} =-1V	60	---
	h _{FE(3)}		I _C =-10mA, V _{CE} =-1V	100	---
	h _{FE(4)}		I _C =-150mA, V _{CE} =-2V	100	300
	h _{FE(5)}		I _C =-500mA, V _{CE} =-2V	20	---
Collector-Emitter Saturation Voltage	V _{CE(sat)}	V	I _C =-150mA, I _B =-15mA	---	-0.40
			I _C =-500mA, I _B =-50mA	---	-0.75
Base-Emitter Saturation Voltage	V _{BE(sat)}	V	I _C =-150mA, I _B =-15mA	---	-0.95
			I _C =-500mA, I _B =-50mA	---	-1.30
Current Gain-Bandwidth Product	f _T	MHz	I _C =-20mA, V _{CE} =-10V f=100MHz	200	---
Noise Figure	NF	dB	V _{CE} =5.0V, f=1.0KHz, I _C =100μA, R _S =1.0KΩ	---	---
Delay time	t _d	nS	V _{CC} =-30V, V _{BE(off)} =-0.5V, I _C =-150mA, I _{B1} =-15mA	---	15
Rise time	t _r	nS		---	20
Storage time	t _s	nS	V _{CC} =-30V, I _C =-150mA, I _{B1} =I _{B2} =-15mA	---	225
Fall time	t _f	nS		---	60

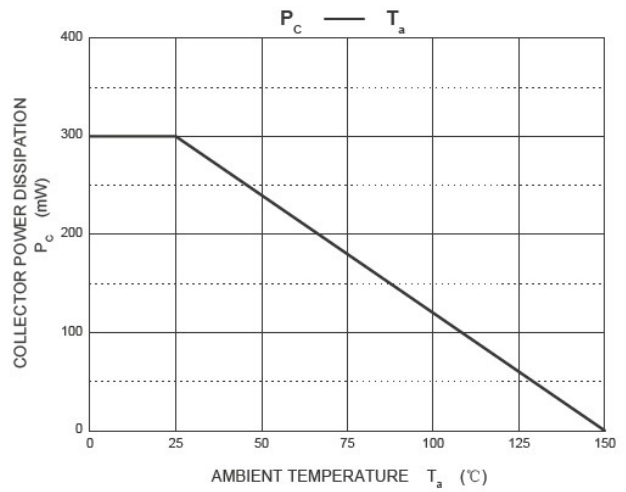
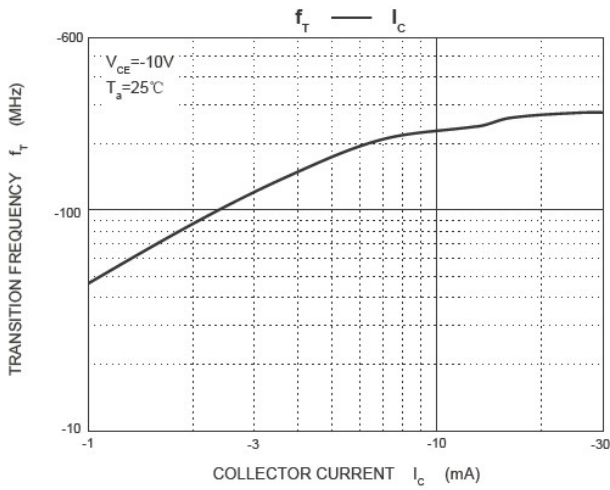
AVAILABLE PACK INFORMATION

Product code	Pack	Reel Size (mm)	Quantity (Pcs/reel)	Quantity (pcs/box)	Quantity (pcs/carton)
MMBT4403	T/R	Φ180	3K	30K	120K

Characteristics(Typical)

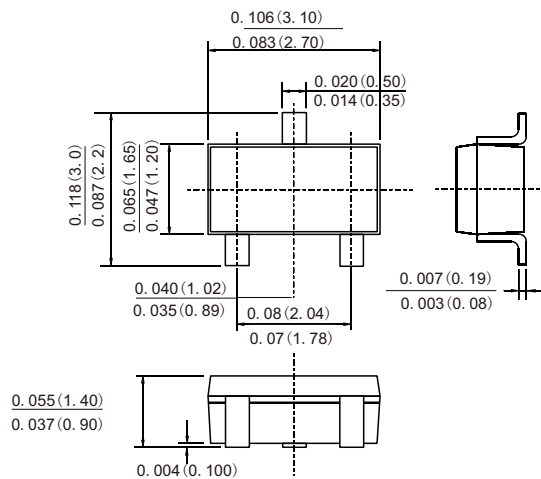


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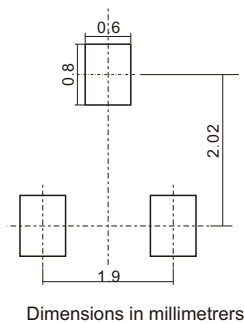
Outline Dimensions

SOT-23



Dimensions in inches and (millimeters)

Suggested pad layout



Dimensions in millimeters

Friendship Reminder

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