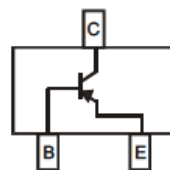
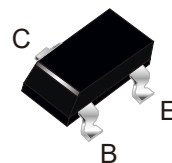


FEATURES

- Epoxy meets UL-94 V-0 flammability rating
- Complementary to S9013
- 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: 2T1

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

Item	Symbol	Unit	Value
Collector-Emitter Voltage	V_{CEO}	V	-25
Collector-Base Voltage	V_{CBO}	V	-40
Emitter-Base Voltage	V_{EBO}	V	-5.0
Collector Current, Continuous	I_C	A	-0.5
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

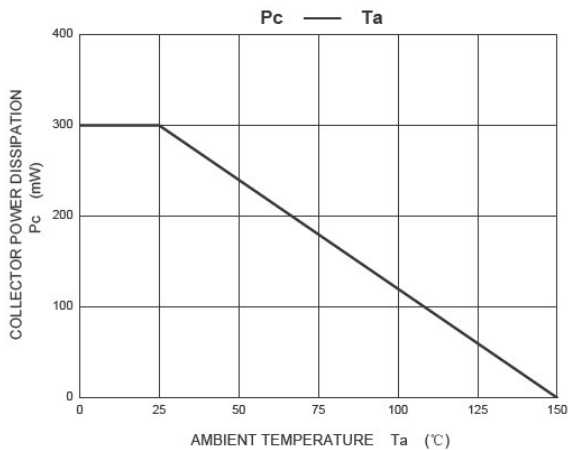
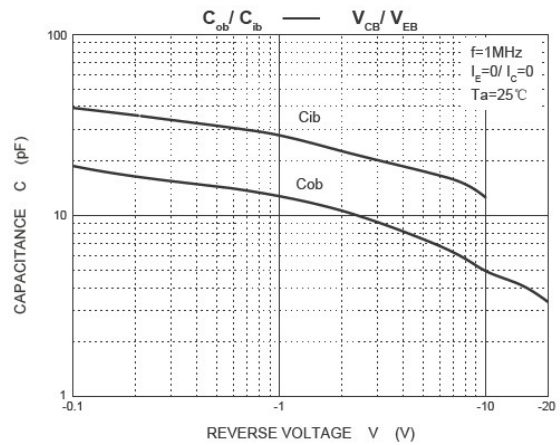
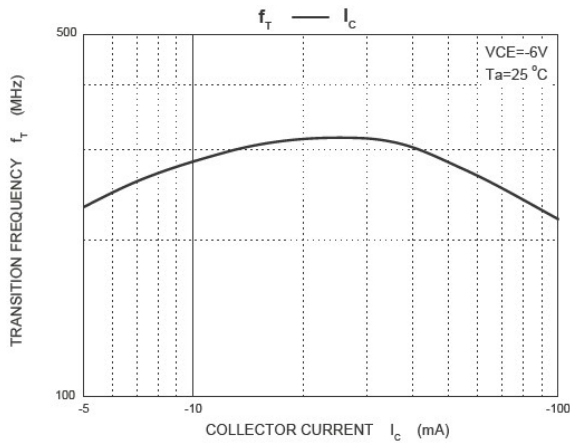
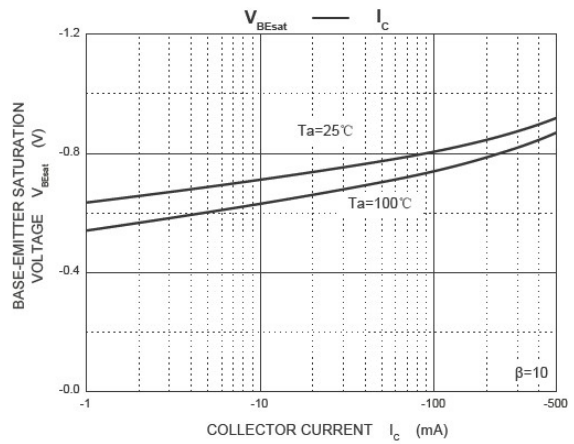
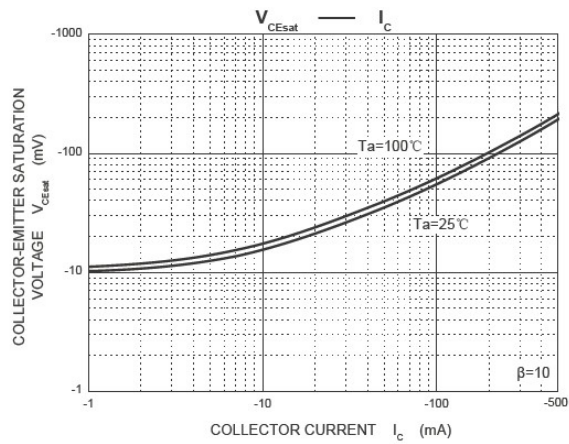
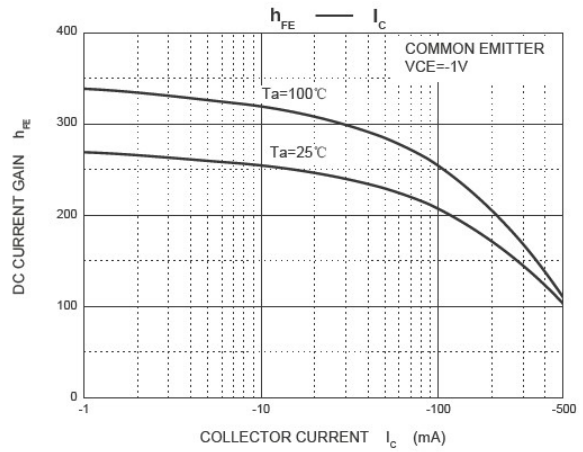
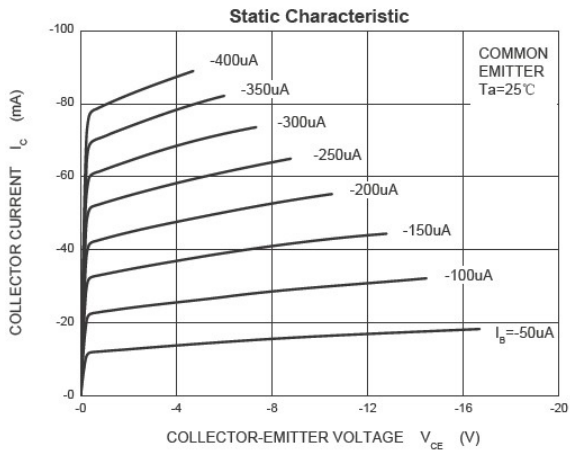
ELECTRICAL CHARACTERISTICS(T_A=25°C Unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	Vdc	I _C =-1.0mA, I _B =0	-25	---
Collector-Base Breakdown Voltage	V _{(BR)CBO}	Vdc	I _C =-100μA, I _E =0	-40	---
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	Vdc	I _E =-100μA, I _C =0	-5.0	---
Collector cut-off Current	I _{CBO}	μA	V _{CB} =-40Vdc, I _E =0	---	-0.1
Collector cut-off Current	I _{CEO}	nA	V _{CE} =-20Vdc, I _B =0	---	-0.1
Emitter cut-off Current	I _{EBO}	μA	V _{EB} =-5Vdc, I _C =0	---	-0.1
DC Current Gain	h _{FE(1)}		I _C =-1mA, V _{CE} =-1.0Vdc	---	---
			I _C =-10mA, V _{CE} =-1.0Vdc	---	---
			I _C =-50mA, V _{CE} =-1.0Vdc	120	400
Collector-Emitter Saturation Voltage	V _{CE(set)}	Vdc	I _C =-10mA, I _B =-1.0mA	---	---
			I _C =-500mA, I _B =-50mA	---	-0.6
Base-Emitter Saturation Voltage	V _{BE(set)}	Vdc	I _C =-10mA, I _B =-1.0mA	---	---
			I _C =-500mA, I _B =-50mA	---	-1.2
Output Capacitance	C _{obo}	pF	V _{CB} =-10Vdc, f=1.0MHZ, I _E =0	---	5
Input Capacitance	C _{ibo}	pF	V _{EB} =-0.5Vdc, f=1.0MHZ, I _C =0	---	---
Current Gain-Bandwidth Product	f _T	MHZ	I _C =-20mA, V _{CE} =-6Vdc f=30MHZ	150	---
Noise Figure	NF	dB	V _{CE} =-5.0V, f=1.0KHZ, I _C =-100μA, R _S =1.0K	---	---

CLASSIFICATION OF h_{FE(1)}

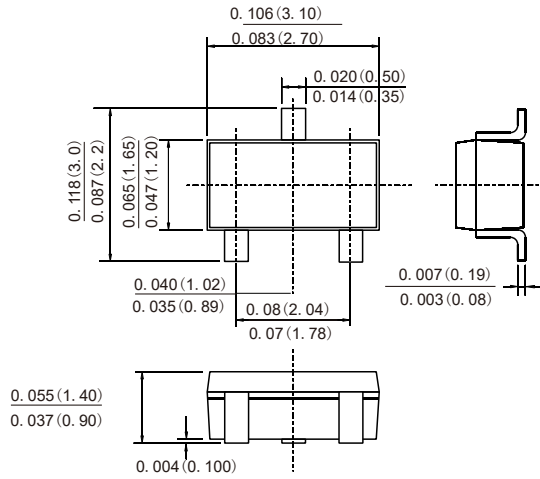
Rank	L	H	J
Range	120-200	200-350	300-400

Characteristics(Typical)



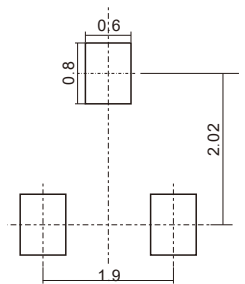
Outline Dimensions

SOT-23



Dimensions in inches and (millimeters)

Suggested pad layout



Dimensions in millimeters

Friendship Reminder

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