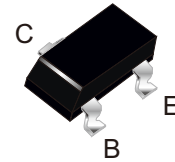


## FEATURES

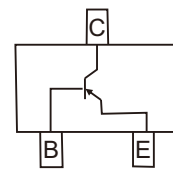
- Epoxy meets UL-94 V-0 flammability rating
- Power Dissipation of 200mW
- Low Collector Current

### SOT-23



## MECHANICAL DATA

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



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

Parameter	Symbol	Unit	Value
Collector-Emitter Voltage	$V_{CE0}$	V	-50
Collector-Base Voltage	$V_{CBO}$	V	-60
Emitter-Base Voltage	$V_{EBO}$	V	-6.0
Collector Current, Continuous	$I_C$	mA	-200
Power Dissipation	$P_D$	mW	200
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	$R_{\theta JA}$	$^{\circ}\text{C}/\text{W}$	625

# 2SA1235A

## ELECTRICAL CHARACTERISTICS(T<sub>A</sub>=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	V	I <sub>C</sub> =-0.1mA, I <sub>B</sub> =0	-50	---
Collector-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	V	I <sub>C</sub> =-100μA, I <sub>E</sub> =0	-60	---
Emitter-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	V	I <sub>E</sub> =-10μA, I <sub>C</sub> =0	-6.0	---
Collector cut-off Current	I <sub>CBO</sub>	nA	V <sub>CB</sub> =-60V, I <sub>E</sub> =0	---	-100
Emitter cut-off Current	I <sub>EBO</sub>	nA	V <sub>EB</sub> =-6V, I <sub>C</sub> =0	---	-100
DC Current Gain	h <sub>FE(1)</sub>		I <sub>C</sub> =-1mA, V <sub>CE</sub> =-6V	150	500
	h <sub>FE(2)</sub>		I <sub>C</sub> =-0.1mA, V <sub>CE</sub> =-6V	90	---
Collector-Emitter Saturation Voltage	V <sub>CE(set)</sub>	V	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA	---	-0.3
Base-Emitter Saturation Voltage	V <sub>BE</sub>	V	I <sub>C</sub> =-100mA, I <sub>B</sub> =-10mA	---	-1.0
Output Capacitance	C <sub>ob</sub>	pF	V <sub>CB</sub> =-60V, f=1.0MHZ, I <sub>E</sub> =0	4.0(Typ)	---
Current Gain-Bandwidth Product	f <sub>T</sub>	MHZ	I <sub>C</sub> =-10mA, V <sub>CE</sub> =-6V f=30MHZ	200(Typ)	---

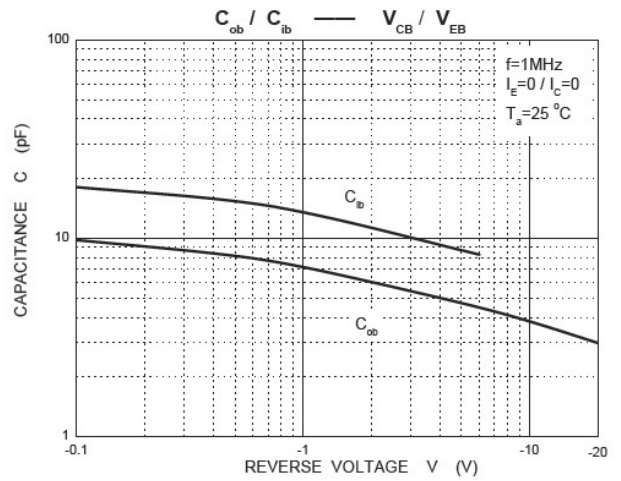
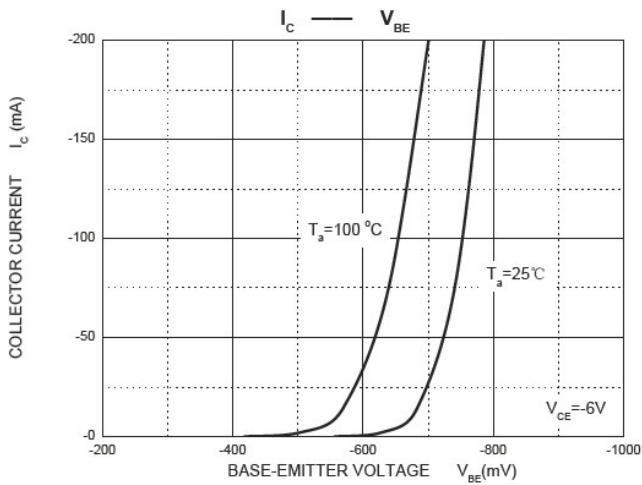
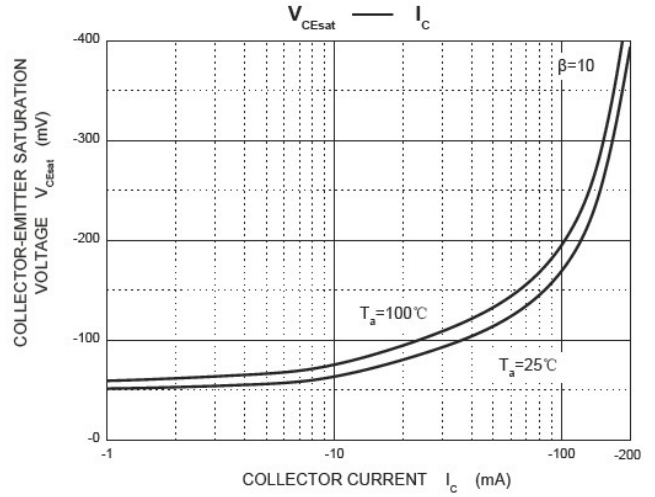
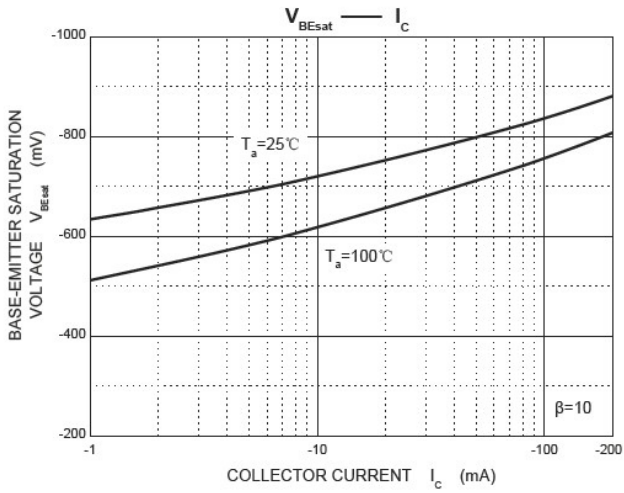
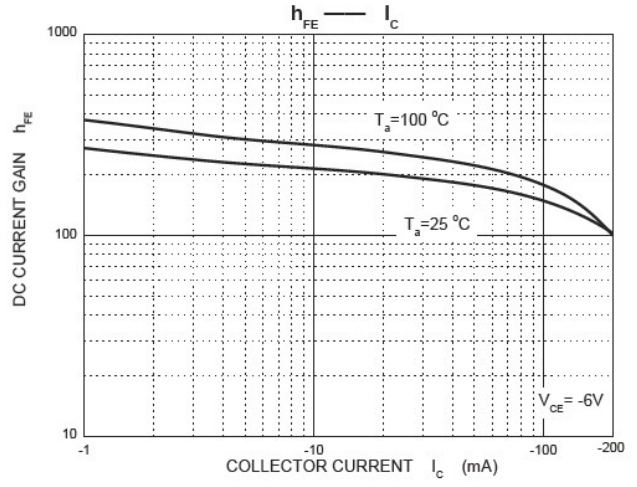
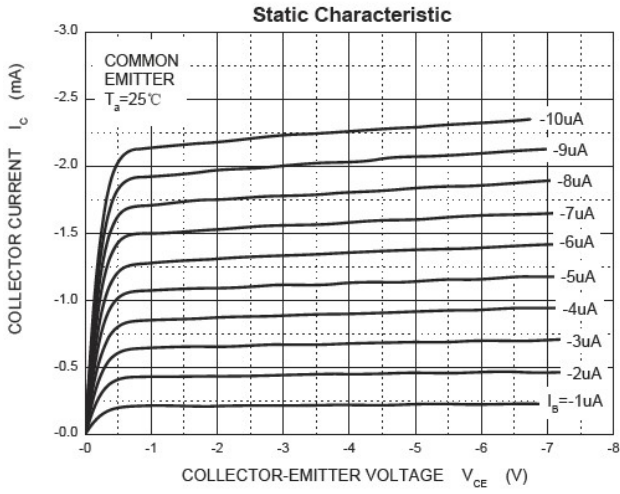
## CLASSIFICATION OF h<sub>FE</sub>

Rank	M•E	M•F
Range	130-300	250-500
Marking	M•E	M•F

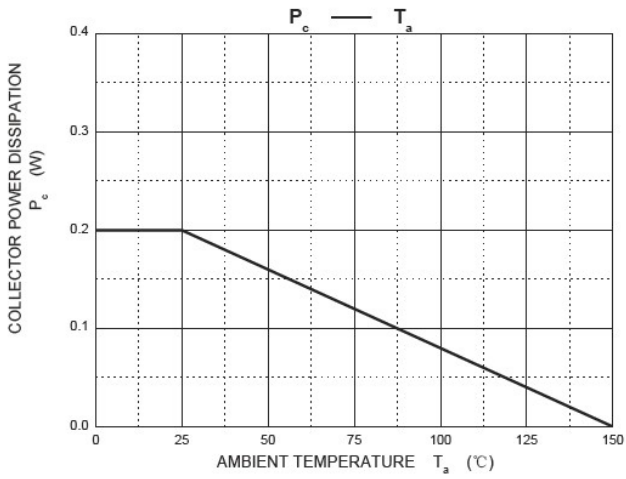
## AVAILABLE PACK INFORMATION

Product code	Pack	Reel Size (mm)	Quantity (Pcs/reel)	Quantity (pcs/box)	Quantity (pcs/carton)
2SA1235A	T/R	Φ180	3K	30K	120K

Characteristics(Typical)

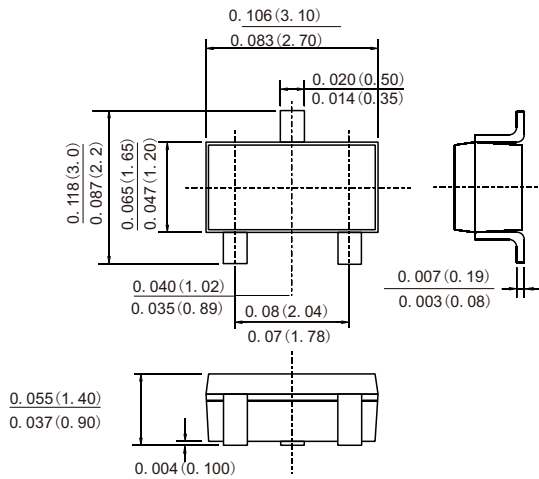


# 2SA1235A



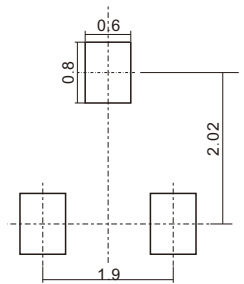
## Outline Dimensions

### SOT-23



Dimensions in inches and (millimeters)

## Suggested pad layout



Dimensions in millimeters

## Friendship Reminder

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