

Silicon Epitaxial Planar Transistor

2SA1182

FEATURES

- Excellent h_{FE} Linearity.
- Complements the 2SC2859.

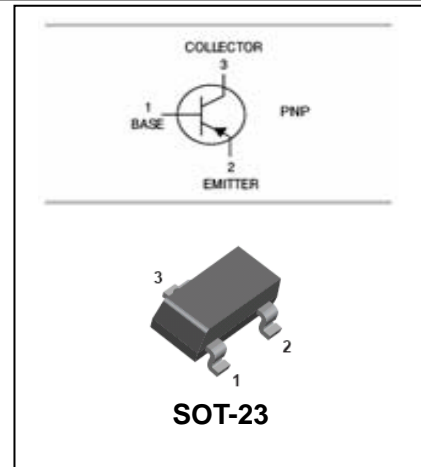


APPLICATIONS

- Ideal for low-voltage operation.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SA1182	ZO/ZY	SOT-23



MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-35	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
I_B	Base Current	-50	mA
P_C	Collector Dissipation	150	mW
T_j	Junction Temperature	125	°C
T_{stg}	Storage Temperature	-55 ~125	°C



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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-35V, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5V, I_C=0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-1V, I_C=-100mA$	70		240	
DC current gain	$h_{FE(2)}$	$V_{CE}=-6V, I_C=-400mA$	25			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-100mA, I_B=-10mA$		-0.1	-0.25	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=-1V, I_C=-100mA$		-0.8	-1.0	V
Transition frequency	f_T	$V_{CE}=-6V, I_C=-20mA$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-6V, I_E=0, f=1MHz$		13		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	70-140	120-240
Marking	ZO	ZY

CLASSIFICATION OF $h_{FE(2)}$

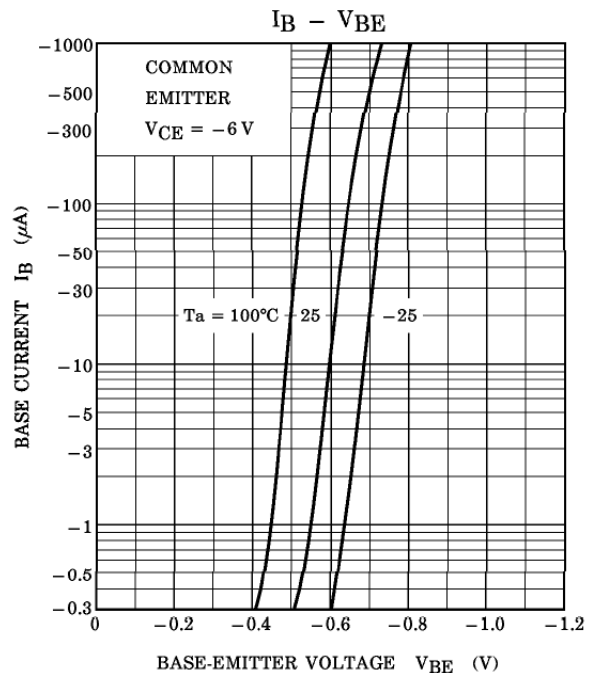
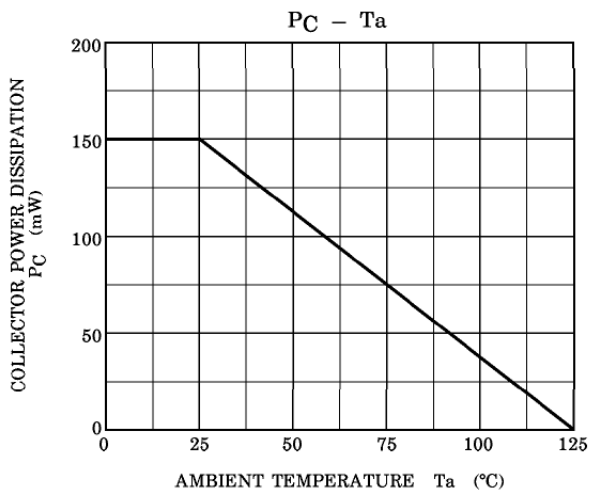
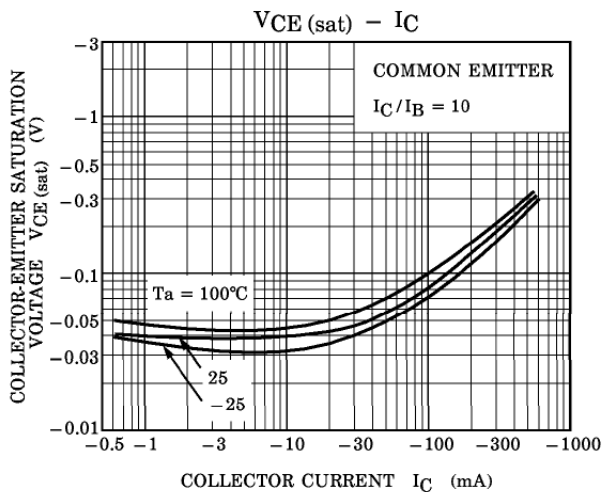
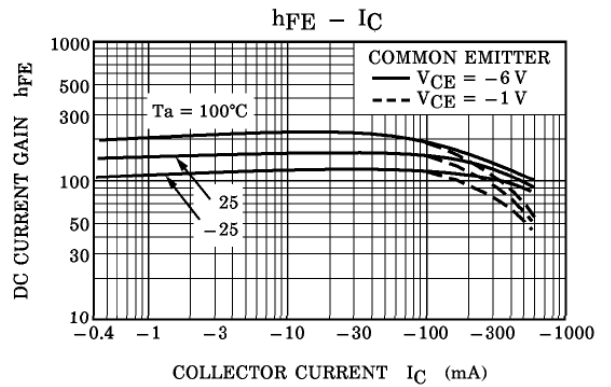
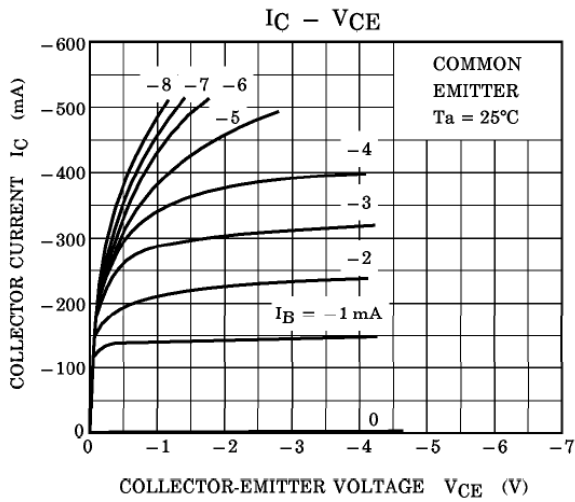
Rank	O	Y
Range	25(Min)	40(Min)
Marking	ZO	ZY



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TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified





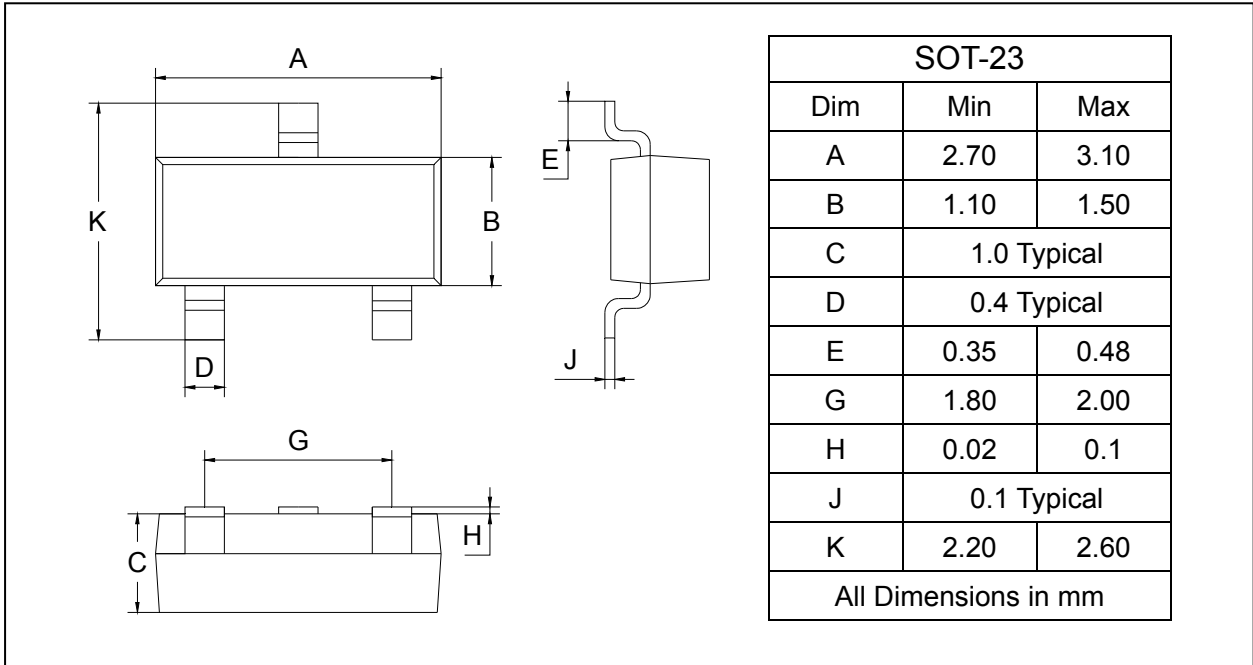
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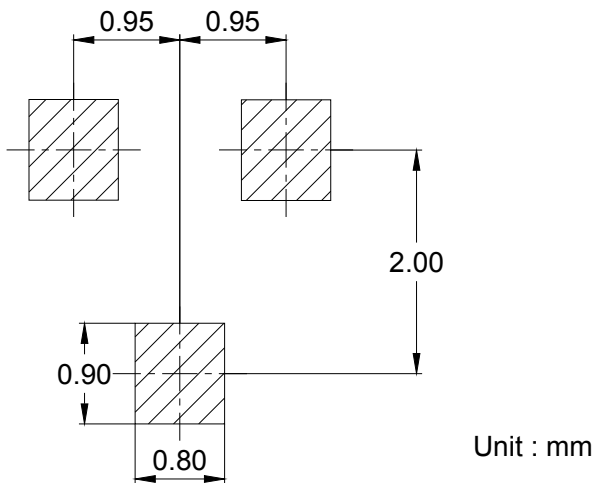
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
2SA1182	SOT-23	3000/Tape&Reel