

Medium Power Transistor

2SB1182

FEATURES

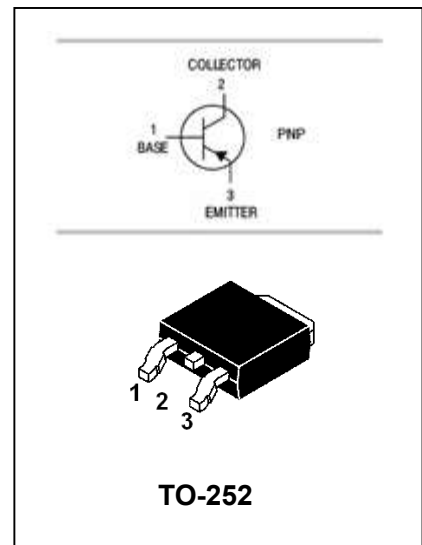
- Low $V_{CE(sat)}$.
 $V_{CE(sat)} = -0.5V(Typ)(I_C/I_B = -2A/-0.2A)$
- Complements the 2SD1758.



APPLICATIONS

- Epitaxial planar type.
- PNP silicon transistor.

HF



Ordering Information

Part Number	Package	Shipping	Marking Code
2SB1182□	TO-252	80/Tube or 2500/Tape Reel	B1182

□: none is for Lead Free package;
“G” is for Halogen Free package.

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-32	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-2(DC)	A
		-3(Pulse)	A
P_C	Collector Power Dissipation	1.5	W
T_j, T_{stg}	Junction and Storage temperature range	-55 to +150	°C

Medium Power Transistor

2SB1182

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V_{CBO}	$I_C=-50\mu\text{A}, I_E=0$	-40			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C=-1\text{mA}, I_B=0$	-32			V
Emitter-base breakdown voltage	V_{EBO}	$I_E=-50\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-20\text{V}, I_E=0$			-1	μA
Emitter cut-off current	I_{EBO}	$V_{EBO}=-4\text{V}, I_C=0$			-1	μA
DC current gain	h_{FE}	$V_{CE}=-3\text{V}, I_C=-0.5\text{A}$	120		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-2\text{A}, I_B=-0.2\text{A}$		-0.5	-0.8	V
Transition frequency	f_T	$V_{CE}=-5\text{V}, I_E=-0.5\text{A}$ $f=30\text{MHz}$		100		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0\text{A}, f=1\text{MHz}$		50		pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	Q	R
Range	120-270	180-390

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

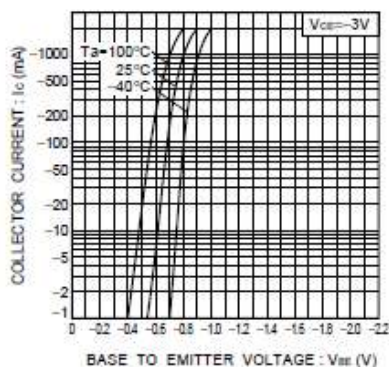


Fig.1 Grounded emitter propagation characteristics

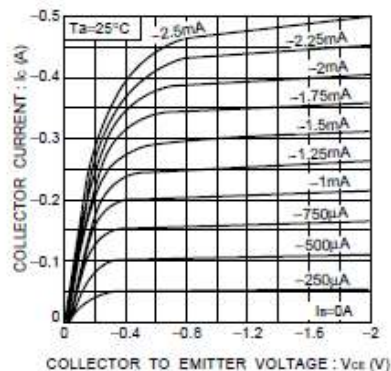


Fig.2 Grounded emitter output characteristics

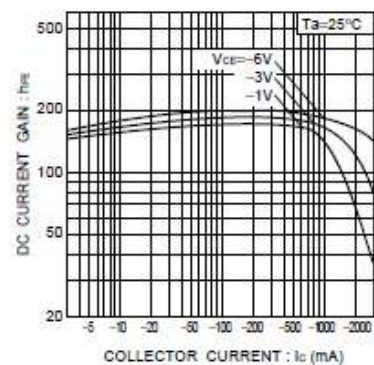


Fig.3 DC current gain vs. collector current (I)

Medium Power Transistor

2SB1182

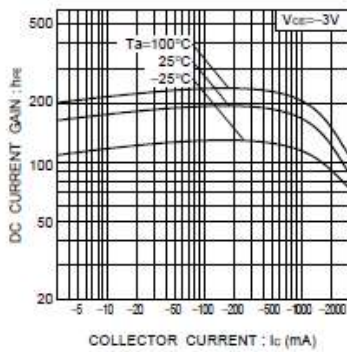


Fig.4 DC current gain vs. collector current (II)

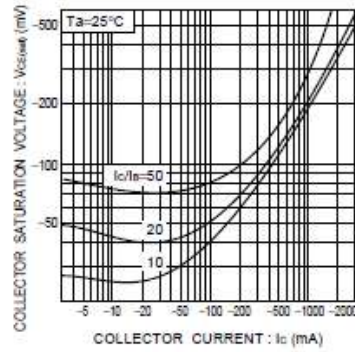


Fig.5 Collector-emitter saturation voltage vs. collector current (I)

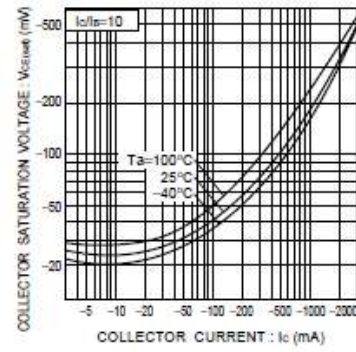


Fig.6 Collector-emitter saturation voltage vs. collector current (II)

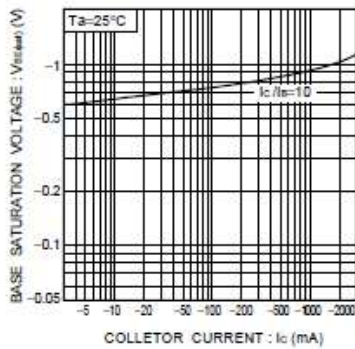


Fig.7 Base-emitter saturation voltage vs. collector current

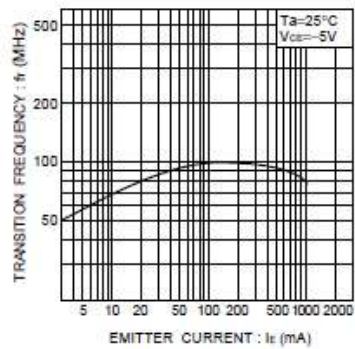


Fig.8 Gain bandwidth product vs. emitter current

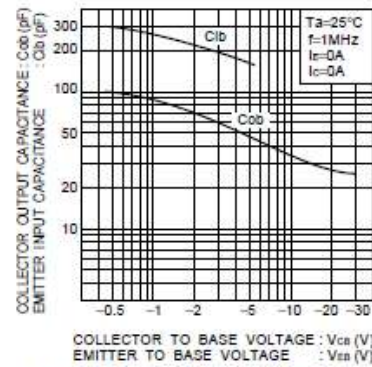


Fig.9 Collector output capacitance vs. collector-base voltage
Emitter input capacitance vs. emitter-base voltage

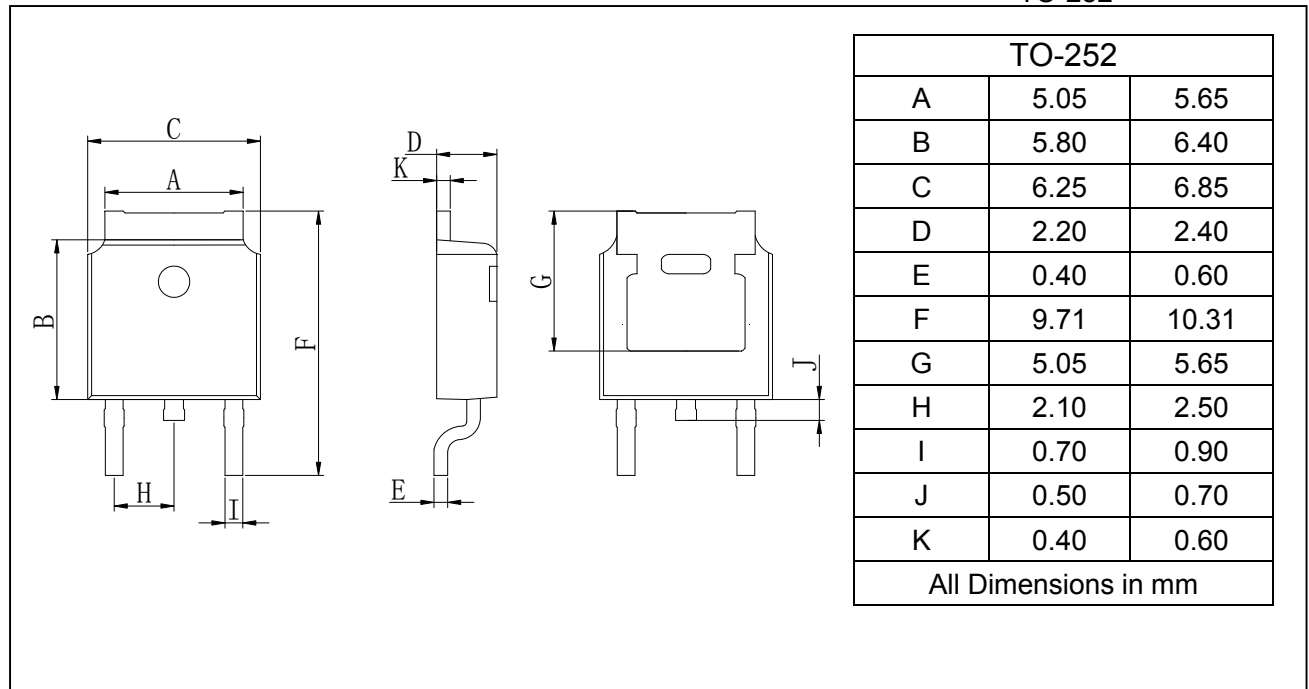
Medium Power Transistor

2SB1182

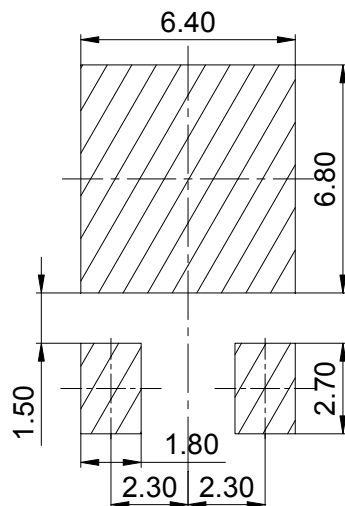
PACKAGE OUTLINE

Plastic surface mounted package

TO-252



SOLDERING FOOTPRINT



Unit :mm