2SB1182

TO-252 Plastic-Encapsulate Transistors

Features

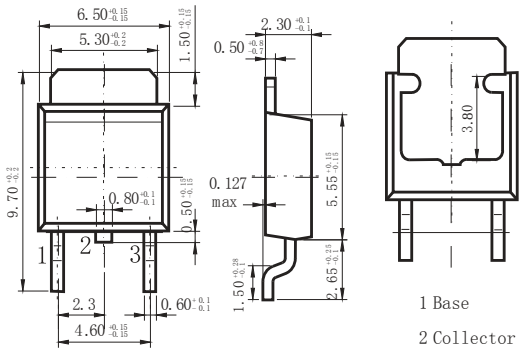
- Low VCE(sat).VCE(sat) = -0.5V
- Complementary to 2SD1758
- PNP Transistors

MECHANICAL DATA

- Case style:SOT-89 molded plastic
- Mounting position:any

TO-252

Unit: mm



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-40	V
Collector - Emitter Voltage	V_{CEO}	-32	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-2	A
Collector current -Pulse	I_{CP}	-3	
Collector Power Dissipation Tc=25°C	P_C	10	W
Ta = 25℃		1	
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-55 to 150	

PACKAGE INFORMATION

Device	Package	Shipping
2SB1182	TO-252	2500/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 μA, I_E=0	-40			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -1 mA, I_B=0	-32			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -30V , I_E=0			-1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -4V , I_C=0			-1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-2 A, I_B=-200mA		-0.5	-0.8	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-2 A, I_B=-200mA			-1.2	
DC current gain	h_{FE}	V_{CE}= -3V, I_C= -500 mA	120		390	
Collector output capacitance	C_{ob}	V_{CB}= -10V, I_E= 0,f=1MHz		50		pF
Transition frequency	f_T	V_{CE}= -5V, I_E= 500mA,f=100MHz		100		MHz

■ Classification of h_{fe}

Type	2SB1182-Q	2SB1182-R
Range	120-270	180-390

RATINGS AND CHARACTERISTIC CURVES

■ Typical Characterisitics

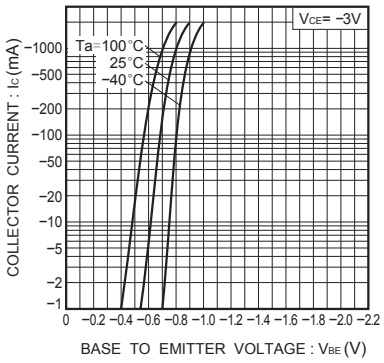


Fig.1 Grounded emitter propagation characteristics

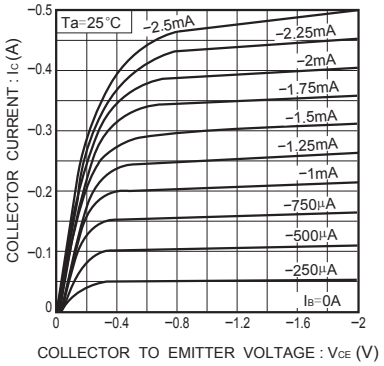


Fig.2 Grounded emitter output characteristics

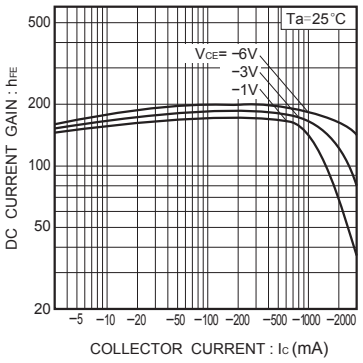


Fig.3 DC current gain vs. collector curren (I)

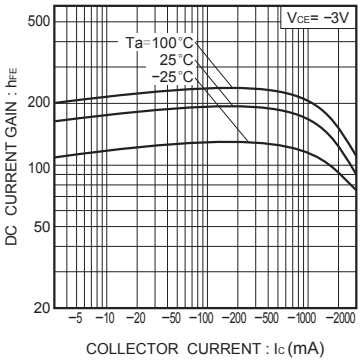


Fig.4 DC current gain vs. collector current (II)

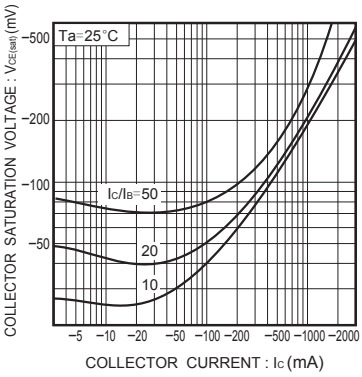


Fig.5 Collector-emitter saturation voltage vs. collector current (I)

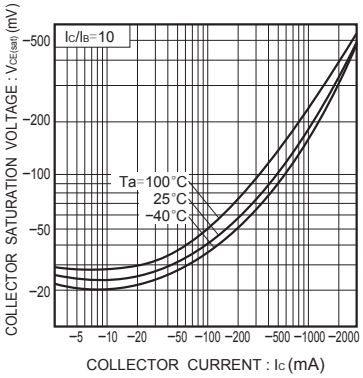


Fig.6 Collector-emitter saturation voltage vs. collector current (II)

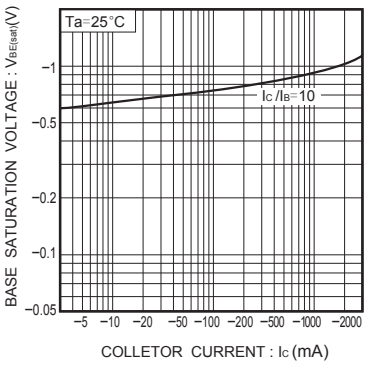


Fig.7 Base-emitter saturation voltage vs. collector current

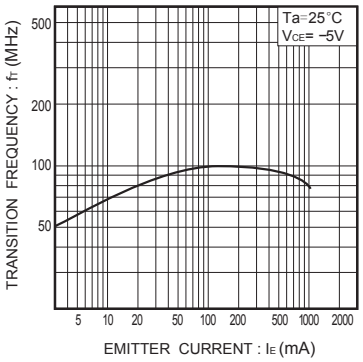


Fig.8 Gain bandwidth product vs. emitter current

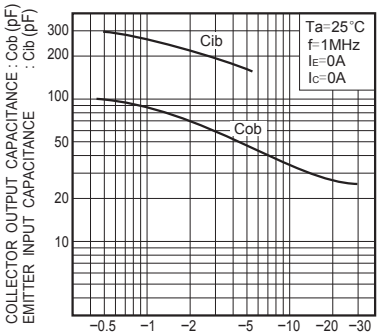


Fig.9 Collector output capacitance vs. collector-base voltage
Emitter input capacitance vs. emitter-base voltage

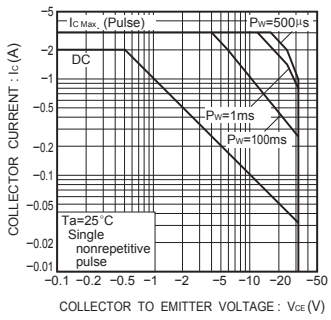


Fig.10 Safe operation area