Elektronische Bauelemente

2SB1197K

-0.8 A, -40 V

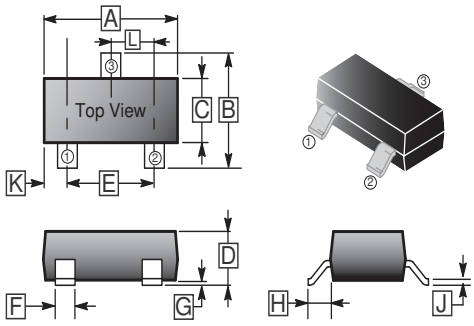
PNP Epitaxial Planar Transistor

RoHS Compliant Product
A suffix of "-C" specifies halogen and lead free

FEATURES

- Low $V_{CE(sat)}$.$V_{CE(sat)} \leqq$-0.5V(I_C / I_B = -0.5A /-50mA)
- I_C =-0.8A

SC-59



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.10	G	0.10 REF.	
B	2.25	3.00	H	0.40 REF.	
C	1.30	1.70	J	0.10	0.20
D	1.00	1.40	K	0.45	0.55
E	1.70	2.30	L	0.85	1.15
F	0.35	0.50			

MECHANICAL DATA

- Case: SC-59,
- Weight: 0.008 grams(approx.)

CLASSIFICATION OF h_{FE}

Product-Rank	2SB1197K-Q	2SB1197K-R
Range	120~270	180~390
Marking	AHQ	AHR

PACKAGE INFORMATION

Package	MPQ	LeaderSize
SC-59	3K	7' inch

ABSOLUTE MAXIMUM RATINGS (T_A = 25℃ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	-40	V
Collector to Emitter Voltage	V_{CEO}	-32	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Currrent	I_C	-800	mA
Total Power Dissipation	Pc	200	mW
Junction & Storage Temperature	T_J, T_{STG}	+150, -55 ~ +150	℃

ELECTRICAL CHARACTERISTICS (T_A = 25℃ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base breakdown voltage	BV_{CBO}	-40	-	-	V	I_C=-50μA
Collector-emitter breakdown voltage	BV_{CEO}	-32	-	-	V	I_C=-1mA
Emitter-base breakdown voltage	BV_{EBO}	-5	-	-	V	I_E=-50μA
Collector cut-off current	I_{CBO}	-	-	-0.5	μA	V_{CB}=-20V
Emitter cut-off current	I_{EBO}	-	-	-0.5	μA	V_{EB}= -4V
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	-0.5	V	I_C=-500mA, I_B=-50mA
DC current gain	h_{FE}	120	-	390		V_{CE}=-3V, I_C=-100mA
Transition frequency	f_T	50	200	-	MHz	V_{CE}=-5V, I_C=-50mA, f=100MHz
Collector output capacitance	C_{OB}	-	12	30	pF	V_{CB}=-10V, I_E=0, f=1MHz

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CHARACTERISTIC CURVES

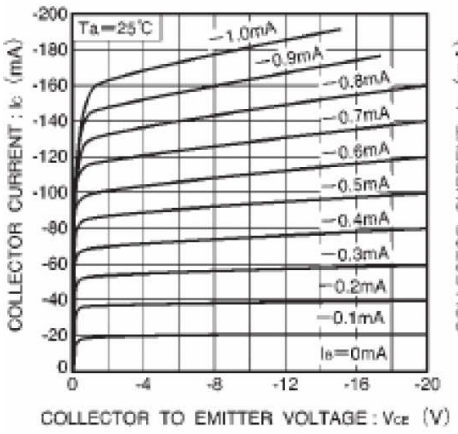

Fig.2 Grounded emitter output characteristics (Ⅰ)

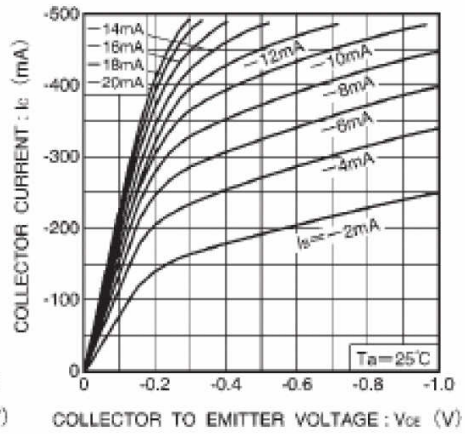

Fig.3 Grounded emitter output characteristics (Ⅱ)

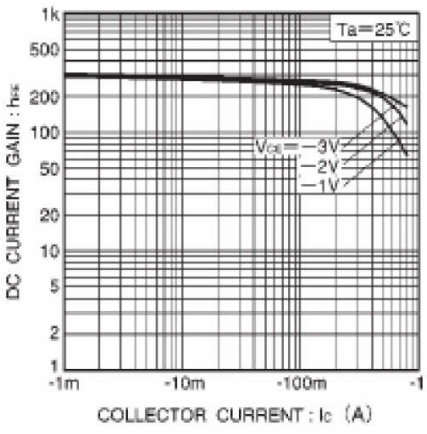

Fig.4 DC current gain vs. collector current

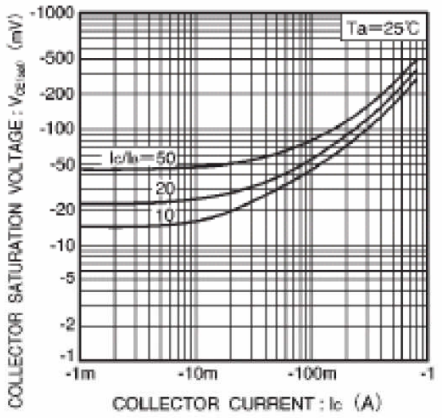

Fig.5 Collector-emitter saturation voltage vs. collector current

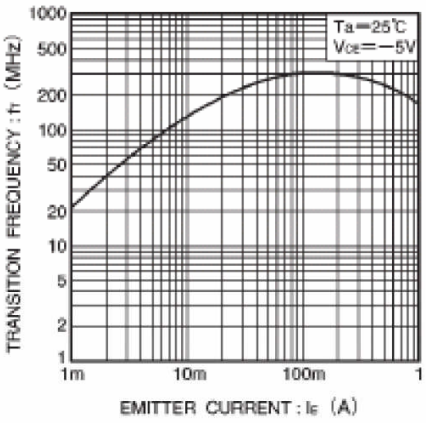

Fig.6 Gain bandwidth product vs. emitter current

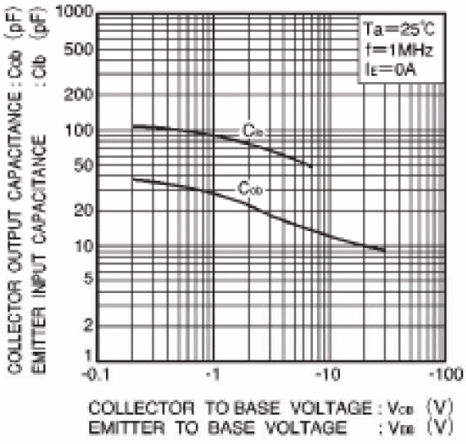

Fig.7 Collector output capacitance vs. collector-base voltage
Emitter input capacitance vs. emitter-base voltage

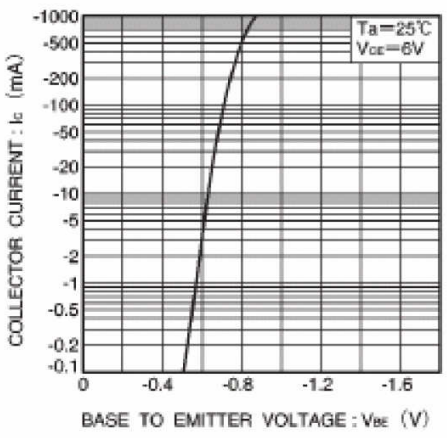

Fig.1 Grounded emitter propagation characteristics