

2SB1218, 2SB1218A

Silicon PNP Epitaxial Planar Type

For general amplification

Complementary pair with 2SD1819 and 2SD1819A

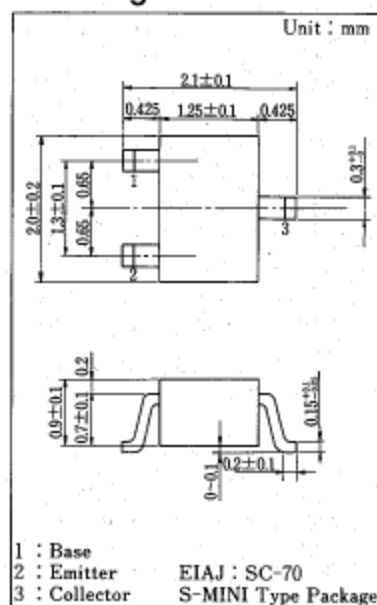
■ Features

- High DC current gain h_{FE}
- As it is an S-MINI type package, downsizing of equipment and automatic insertion by taping and magazine packaging are possible

■ Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Item	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-25	V
		-45	
Collector-Base Voltage	V_{CBO}	-25	V
		-45	
Collector-Emitter Voltage	V_{EBO}	-7	V
Peak Collector Current	I_{CP}	-200	mA
Collector Current	I_C	-100	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

■ Package Dimensions



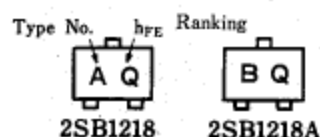
■ Electrical Characteristics ($T_a=25^\circ\text{C}$)

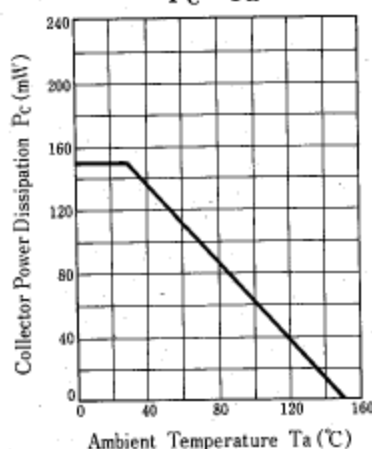
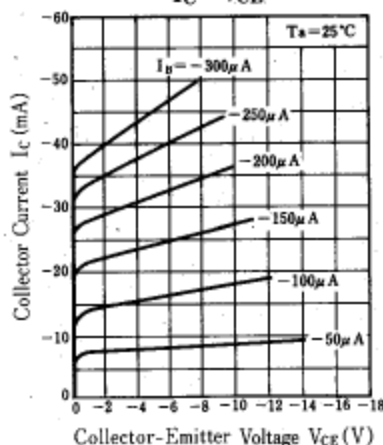
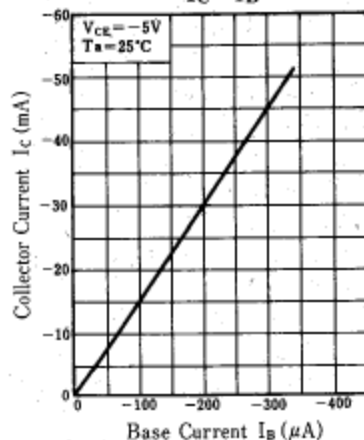
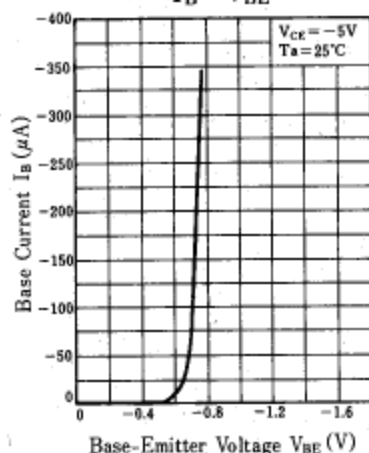
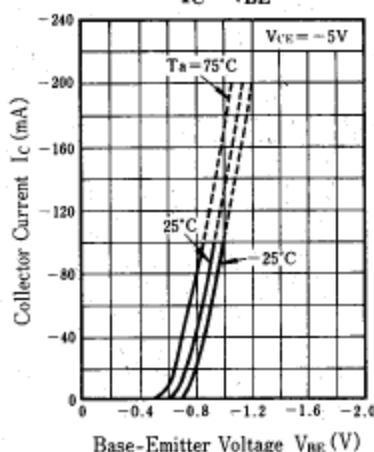
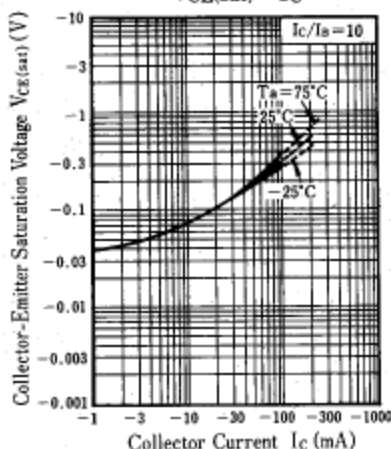
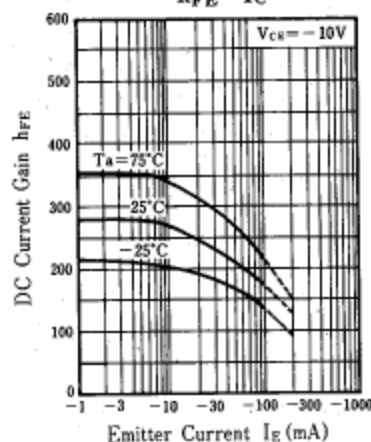
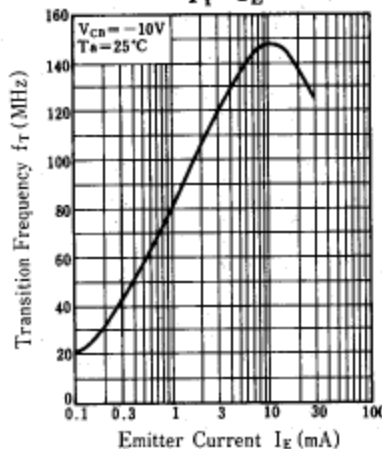
Item	Symbol	Condition	min.	typ.	max.	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = -20\text{V}, I_E = 0$			-0.1	μA
	I_{CBO}	$V_{CB} = -10\text{V}, I_B = 0$			-100	
Collector-Base Voltage	V_{CBO}	$I_C = -10\mu\text{A}, I_E = 0$	-25			V
			-45			
Collector-Emitter Voltage	V_{CBO}	$I_C = -2\text{mA}, I_B = 0$	-25			V
			-45			
Emitter-Base Voltage	V_{EBO}	$I_E = -10\mu\text{A}, I_C = 0$	-7			V
DC Current Gain	h_{FE}^*	$V_{CE} = -10\text{V}, I_C = -2\text{mA}$	160		460	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$		-0.3	-0.5	V
Transition Frequency	f_T	$V_{CB} = -10\text{V}, I_E = 1\text{mA}, f = 200\text{MHz}$		80		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		2.7		pF

* h_{FE} Ranking

Rank	Q	R	S
h_{FE}	160 ~ 260	210 ~ 340	290 ~ 460
Marking	2SB1218	AQ	AR
	2SB1218A	BQ	BR

■ Type Name Marking (Example)



$P_C - T_a$  $I_C - V_{CE}$  $I_C - I_B$  $I_B - V_{BE}$  $I_C - V_{BE}$  $V_{CE(sat)} - I_C$  $h_{FE} - I_C$  $f_T - I_E$  $C_{ob} - V_{CB}$ 