

# 2SB1218, 2SB1218A

## Silicon PNP Epitaxial Planar Type

For general amplification

Complementary pair with 2SD1819 and 2SD1819A

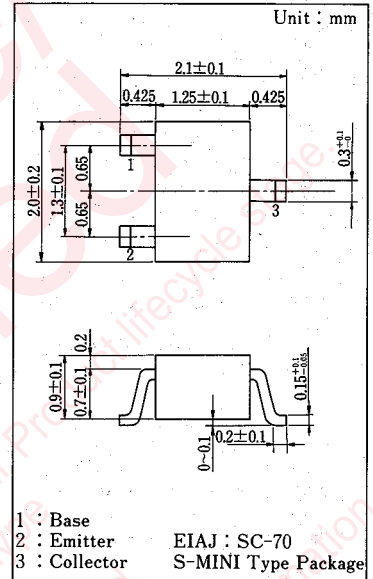
### ■ Features

- 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	$V_{CB0}$	-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



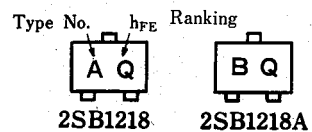
### ■ Electrical Characteristics ( $T_a=25^\circ\text{C}$ )

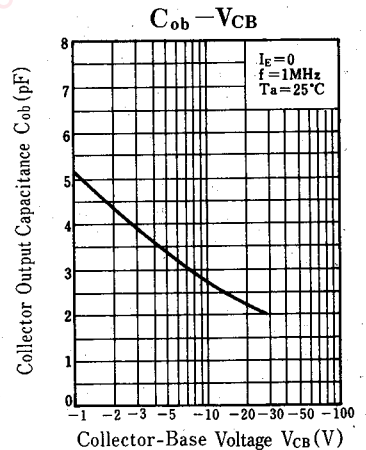
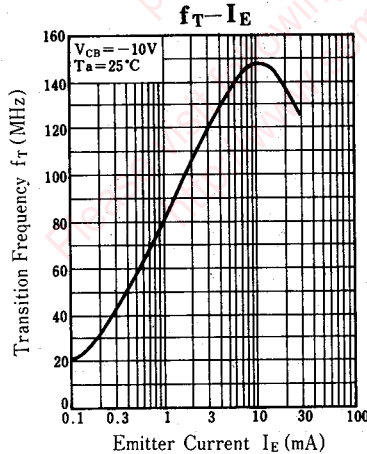
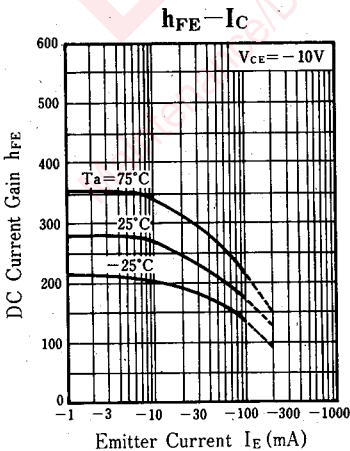
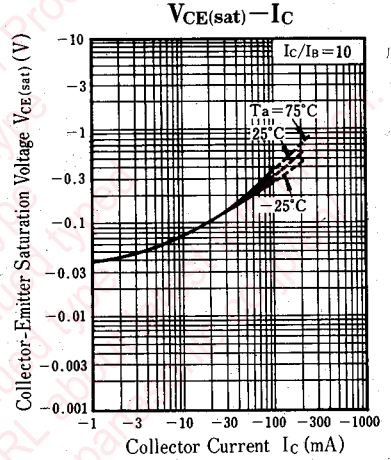
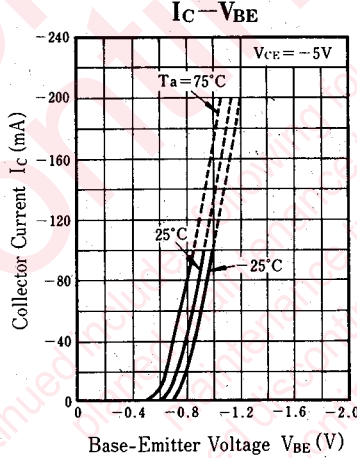
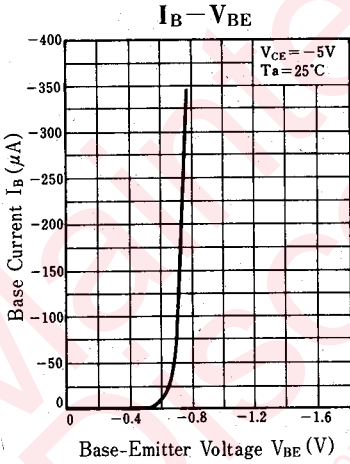
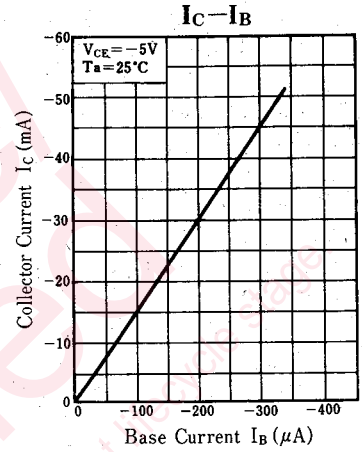
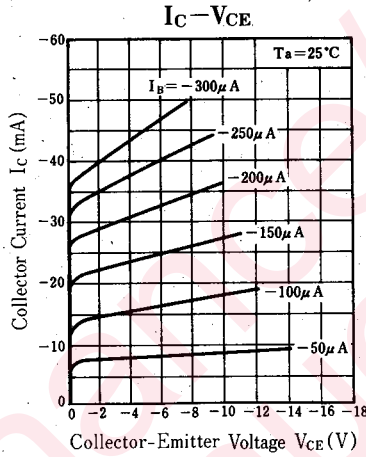
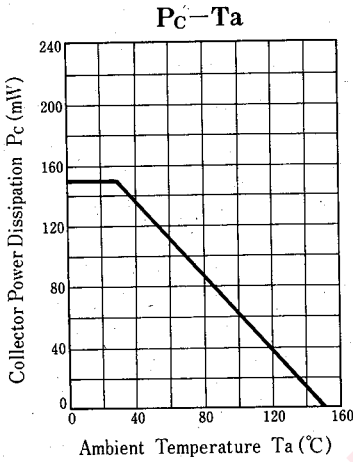
Item	Symbol	Condition	min.	typ.	max.	Unit
Collector Cutoff Current	$I_{CB0}$	$V_{CB} = -20\text{V}, I_E = 0$			-0.1	$\mu\text{A}$
	$I_{CEO}$	$V_{CE} = -10\text{V}, I_B = 0$			-100	
Collector-Base Voltage	$V_{CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-25			V
			-45			
Collector-Emitter Voltage	$V_{CBO}$	$I_C = -2\text{mA}, I_B = 0$	-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

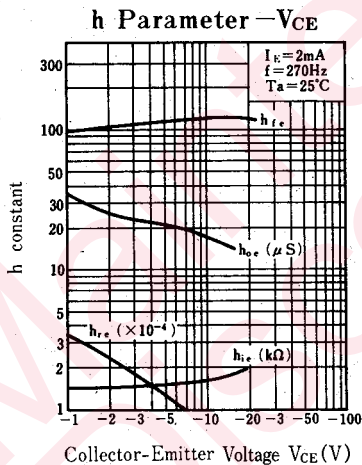
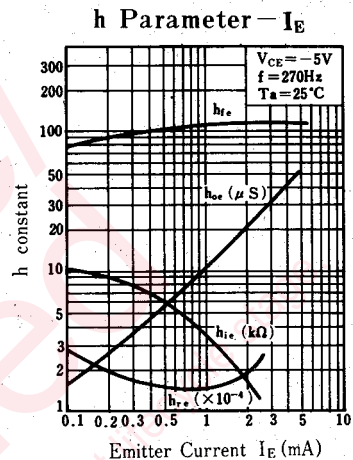
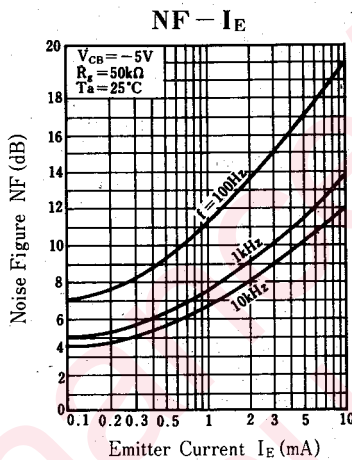
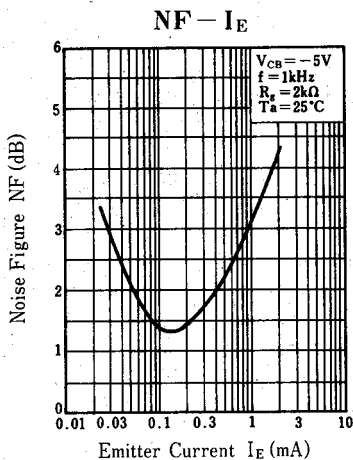
\*  $h_{FE}$  Ranking

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

### ■ Type Name Marking (Example)







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