

SANYO

No.1785A

2SB1119/2SD1619

PNP/NPN Epitaxial Planar Silicon Transistors

LF Amp, Electronic Governor Applications

Features

- . Very small size making it easy to provide high-density, small-sized hybrid IC's

(): 2SB1119

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

			unit
Collector to Base Voltage	V_{CB0}	(-)25	V
Collector to Emitter Voltage	V_{CEO}	(-)25	V
Emitter to Base Voltage	V_{EBO}	(-)5	V
Collector Current	I_C	(-)1	A
Collector Current(Pulse)	I_{CP}	(-)2	A
Collector Dissipation	P_C	500	mW
	P_C Mounted on ceramic board (250mm ² x 0.8mm)	1.3	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)20\text{V}, I_E=0$			(-)0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4\text{V}, I_C=0$			(-)0.1	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=(-)2\text{V}, I_C=(-)50\text{mA}$	100 *		560 *	
	$h_{FE}(2)$	$V_{CE}=(-)2\text{V}, I_C=(-)1\text{A}$	40			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10\text{V}, I_C=(-)50\text{mA}$		180		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)500\text{mA}, I_B=(-)50\text{mA}$		0.1	0.3	V
				(-0.15)	(-0.7)	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500\text{mA}, I_B=(-)50\text{mA}$		(-)0.85	(-)1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu\text{A}, I_E=0$	(-)25			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1\text{mA}, R_{BE}=\infty$	(-)25			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu\text{A}, I_C=0$	(-)5			V
Output Capacitance	c_{ob}	$V_{CB}=(-)10\text{V}, f=1\text{MHz}$		15		pF
				(25)		pF

*:The 2SB1119/2SD1619 are classified by 50mA h_{FE} as follows:

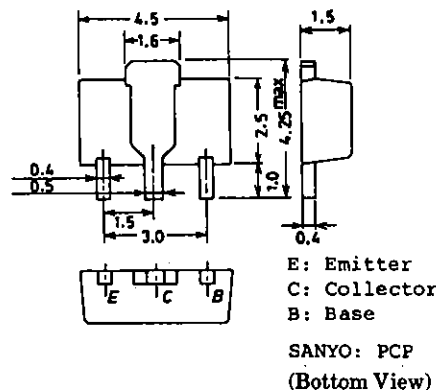
100	R	200	140	S	280	200	T	400	280	U	560
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Marking 2SB1119:BB

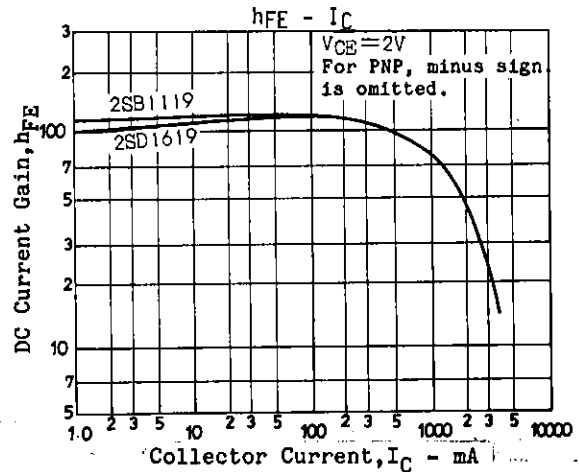
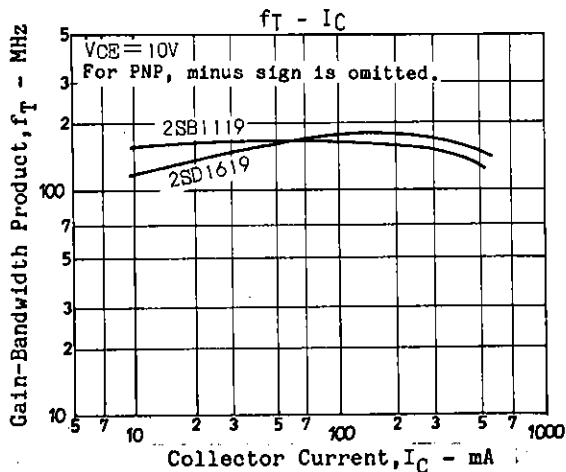
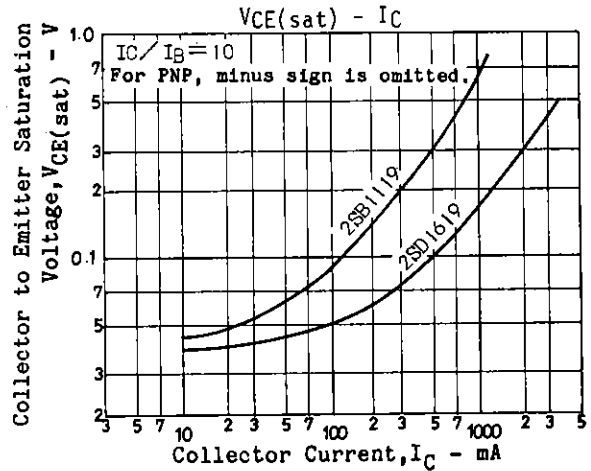
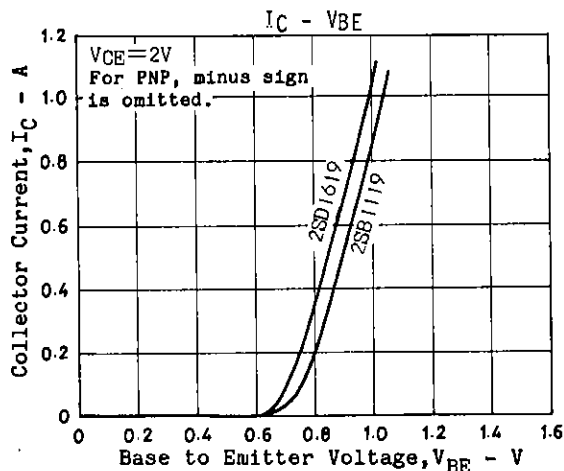
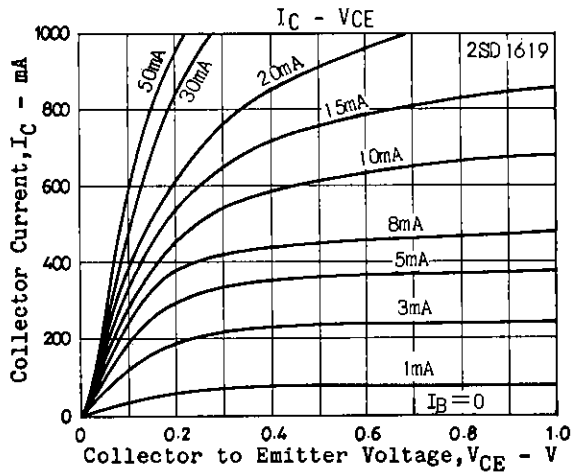
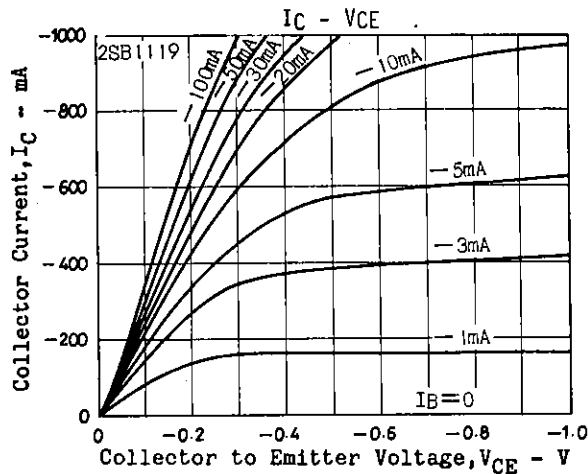
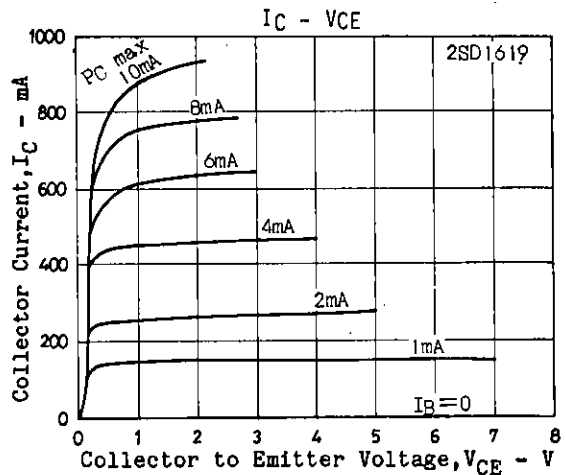
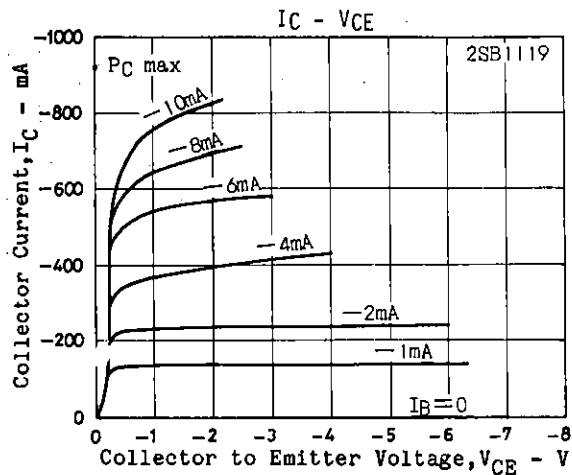
2SD1619:DB

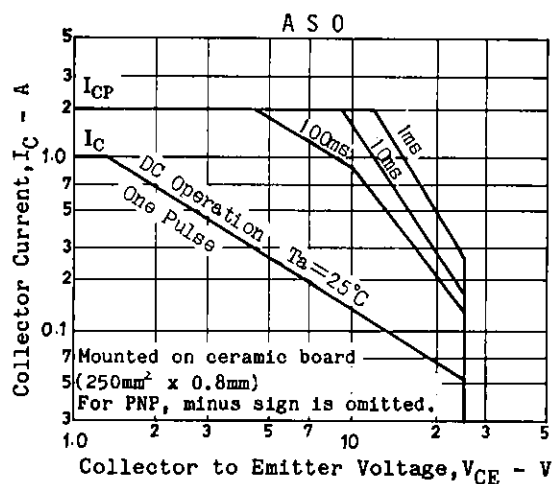
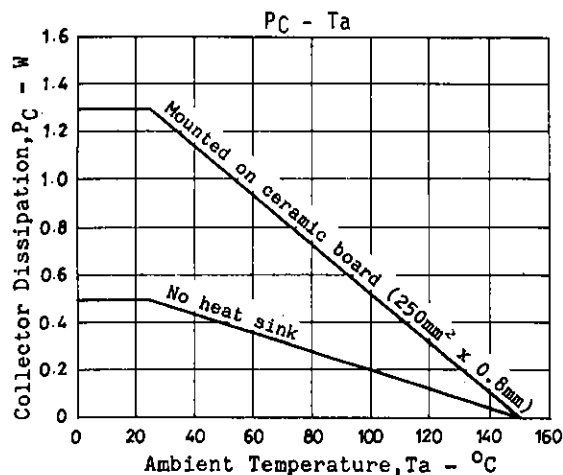
 h_{FE} rank :R,S,T,U**Package Dimensions 2038**

(unit:mm)

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