

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 Ta=25°C

Collector to Base Voltage	V_{CBO}	(-)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	°C
Storage Temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics at Ta=25°C

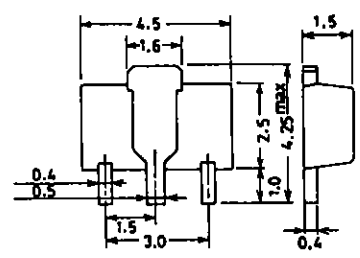
		min	typ	max	unit
Collector Cutoff Current	I_{CBO} $V_{CB}=(-)20V, I_E=0$			(-)0.1	µA
Emitter Cutoff Current	I_{EBO} $V_{EB}=(-)4V, I_C=0$			(-)0.1	µA
DC Current Gain	$h_{FE}(1)$ $V_{CE}=(-)2V, I_C=(-)50mA$	100*		560*	
	$h_{FE}(2)$ $V_{CE}=(-)2V, I_C=(-)1A$	40			
Gain-Bandwidth Product	f_T $V_{CE}=(-)10V, I_C=(-)50mA$		180		MHz
C-E Saturation Voltage	$V_{CE(sat)}$ $I_C=(-)500mA, I_B=(-)50mA$		0.1	0.3	V
			(-0.15)	(-0.7)	V
B-E Saturation Voltage	$V_{BE(sat)}$ $I_C=(-)500mA, I_B=(-)50mA$	(-)0.85	(-)1.2		V
C-B Breakdown Voltage	$V_{(BR)CBO}$ $I_C=(-)10µA, I_E=0$	(-)25			V
C-E Breakdown Voltage	$V_{(BR)CEO}$ $I_C=(-)1mA, R_{BE}=∞$	(-)25			V
E-B Breakdown Voltage	$V_{(BR)EBO}$ $I_E=(-)10µA, I_C=0$	(-)5			V
Output Capacitance	c_{ob} $V_{CB}=(-)10V, f=1MHz$		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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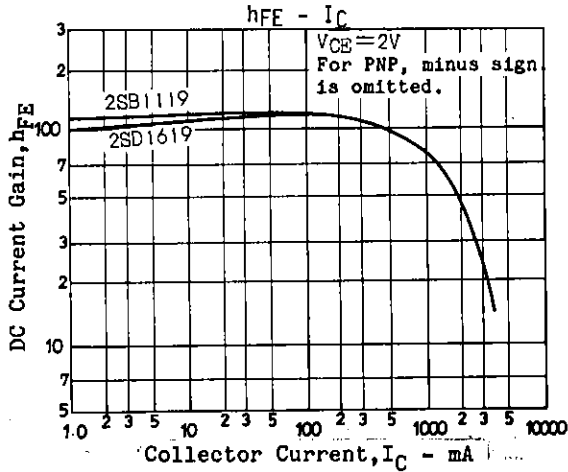
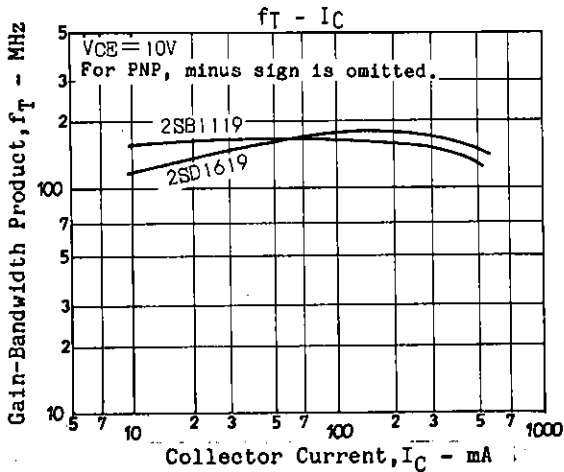
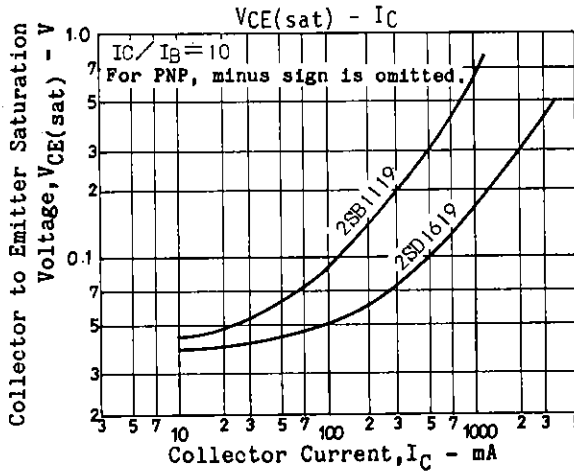
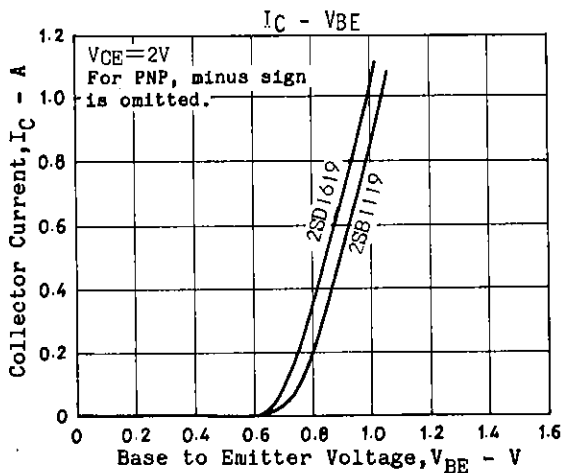
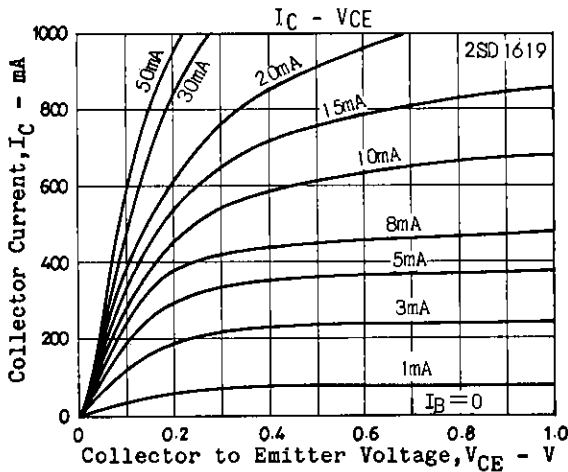
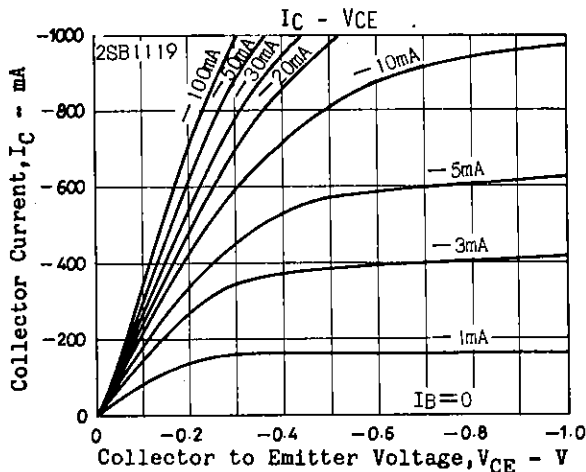
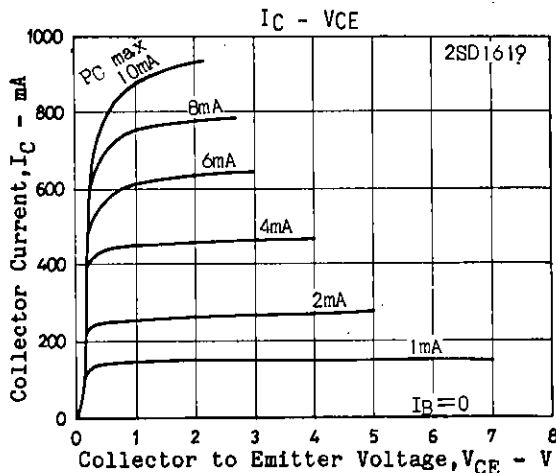
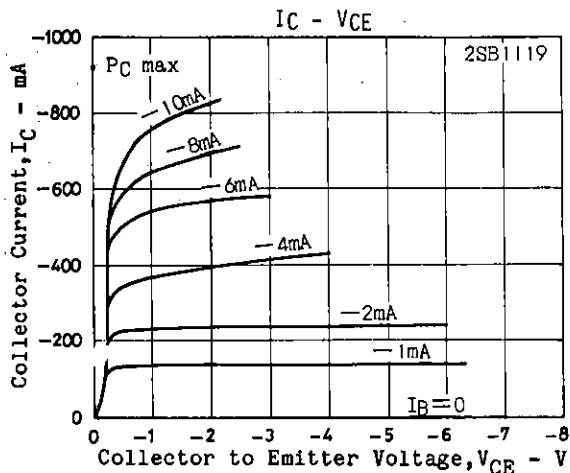
Marking 2SB1119:BB
 2SD1619:DB
 h_{FE} rank :R,S,T,U

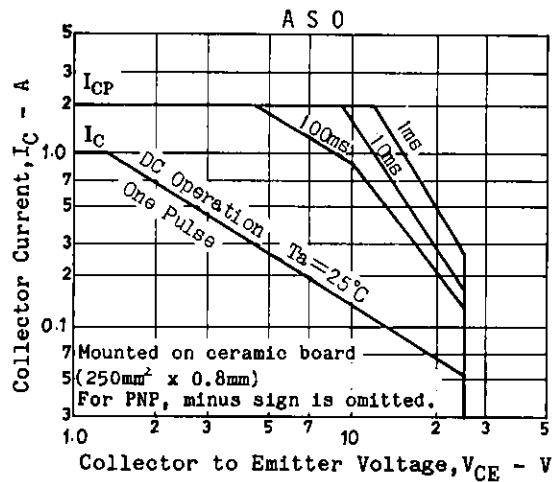
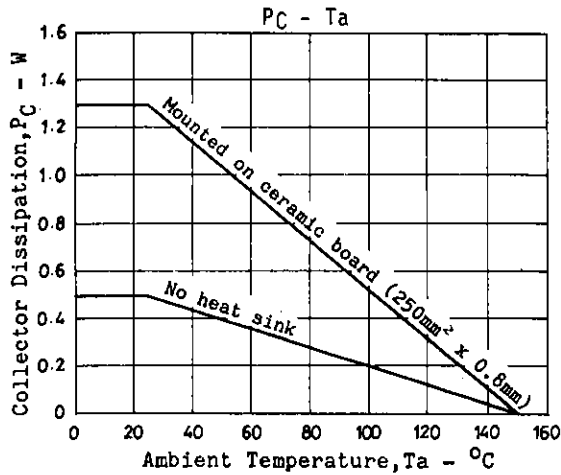
Package Dimensions 2038
(unit:mm)



E: Emitter
 C: Collector
 B: Base
 SANYO: PCP
 (Bottom View)

2SB1119/2SD1619





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