PNP/NPN Epitaxial Planar Silicon Transistors



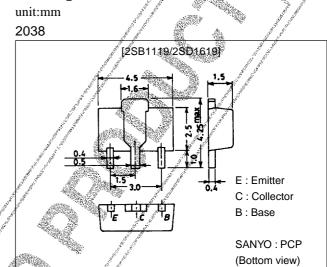
2SB1119/2SD1619

LF Amplifier, Electronic Governor Applications

Features

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

Package Dimensions



():2SB1119

100

.∕R.∕ 200

Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Collector-to-Base Voltage	VCBO	(–)25	V
Collector-to-Emitter Voltage	VCEO	(–)25	V
Emitter-to-Base Voltage	VEBO	(–)5	V
Collector Current		(–)1	А
Collector Current (Pulse)	/ ICP	(–)2	A
Collector Dissipation	BC	500	mW
	Rc Mounted on ceramic board (250mm ² ×0.8mm)	1.3	W
Junction Temperature		150	°C
Storage Temperature	Tsig	-55 to +150	°C

Electrical Characteristics at Ta = 25 °C.

	Symbol	Conditions	Ratings			Unit
Falameter			min	typ	max	Unit
Collector Cutoff Current	Ісво /	[⊮] V _{CB} =(−)20V, I _E =0			(–)0.1	μA
Emitter Cutoff Current	IEBO/	V _{EB} =(-)4V, I _C =0			(–)0.1	μA
DC Current Gain	bF₽1	V _{CE} =(-)2V, I _C =(-)50mA	100*		560*	
Gain-Bandwidth Broduct	hFE2	V _{CE} =(-)2V, I _C =(-)1A	40			
Gain-Bandwidth Broduct	fT	V _{CE} =(-)10V, I _C =(-)50mA		180		MHz

*; The 2SB1119/2SD1619 are classified by 50mA hFE as follows :

-**140 S** 280

Marking 2SB1119 : BB

2SD1619 : DB h_{FE} rank : R, S, T, U

Any and all SANYO products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's

280 U 560

200 7 400

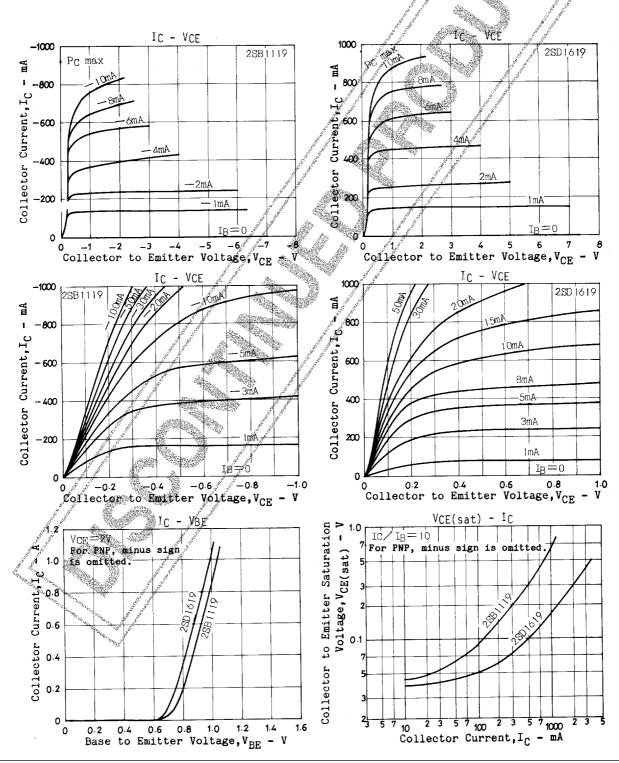
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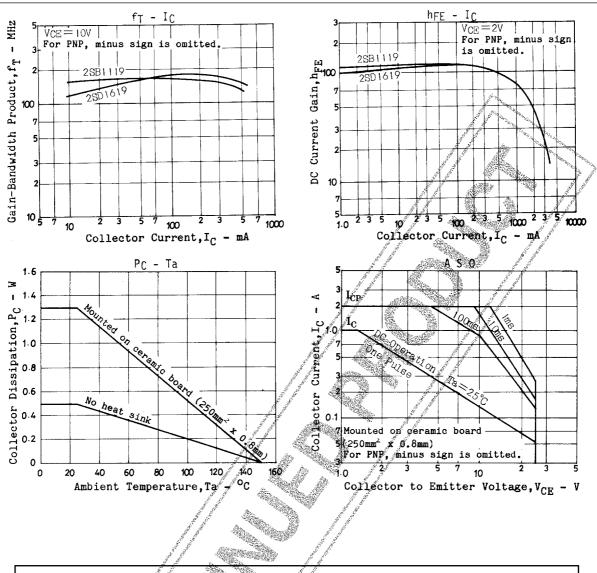
SANYO Electric Co., Ltd. Semiconductor Bussiness Headquaters TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

2SB1119/2SD1619

Parameter	Symbol	Conditions		Ratings		
			min	typ	max	Unit
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(–)500mA, I _B =(–)50mA		0.1	0.3	V
				(-0.15)	(-0.7)	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =(-)500mA, I _B =(-)50mA	é	()0.85	()1.2	V
Collector-to-Base Breakdown Voltage	V _(BR) CBO	I _C =(-)10μΑ, I _E =0	(+)2	5		V
Collector-to-Emitter Breakdown Voltage	V _(BR) CEO	I _C =(–)1mA, R _{BE} =∞	(_) 2	5 Transford		V
Emitter-to-Base Breakdown Voltage	V(BR)EBO	I _E =(-)10μA, I _C =0	J ∫ (−)	5	CEACH SCHOOL	V
Output Capacitance	Cob	V _{CB} =(-)10V, f=1MHz	and the second	15	and the second second	pF
			and the second	(25)	and a second	ЪР



2SB1119/2SD1619



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