# Low frequency amplifier 2SB1695

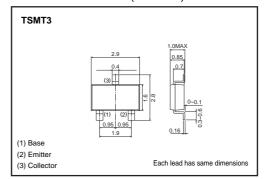
### Application

Low frequency amplifier Driver

# ● Features

- 1) A collector current is large.
- 2) VcE(sat) ≤-370mV at Ic =-1A / Iв =-50mA

# ●External dimensions (Unit : mm)



# ● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	Vсво	-30	V
Collector-emitter voltage	Vceo	-30	V
Emitter-base voltage	Vево	-6	V
Collector current	Ic	-1.5	Α
Collector current	Іср	-3	Α*
Power dissipation	Pc	500	mW
Junction temperature	Tj	150	°C
Range of storage temperature	Tstg	<b>−55~+150</b>	°C

<sup>\*</sup>Single pulse, Pw=1ms

### Packaging specifications

	Package	Taping
Туре	Code	TL
	Basic ordering unit (pieces)	3000
2SB1695		0

# ●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Collector-base breakdown voltage	ВУсво	-30	_	_	V	Ic=-10μA
Collector-emitter breakdown voltage	BVceo	-30	_	_	V	Ic=-1mA
Emitter-base breakdown voltage	ВVево	-6	_	_	V	Iε=-10μA
Collector cutoff current	Ісво	_	_	-100	nA	VcB=-30V
Emitter cutoff current	ІЕВО	_	-	-100	nA	V <sub>EB</sub> =-6V
Collector-emitter saturation voltage	VCE(sat)	_	-200	-370	mV	Ic=-1A, Iв=-50mA
DC current gain	hfe	270	_	680	_	Vce=-2V, Ic=-100mA*
Transition frequency	f⊤	_	280	_	MHz	Vce=-2V, Ie=100mA, f=100MHz*
Corrector output capacitance	Cob	_	13	_	pF	Vcb=-10V, Ie=0A, f=1MHz
* Pulsed						

#### Electrical characteristic curves

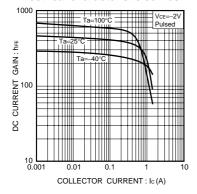


Fig.1 DC current gain vs. collector current

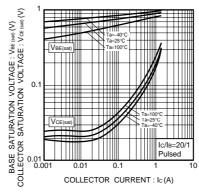


Fig.2 Collector-emitter saturation voltage base-emitter saturation voltage vs. collector current

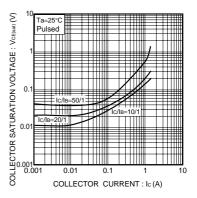


Fig.3 Collector-emitter saturation voltage vs. collector current

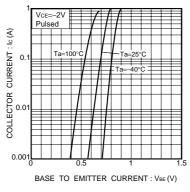


Fig.4 Grounded emitter propagation characteristics

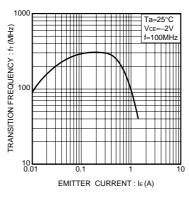


Fig.5 Gain bandwidth product vs. emitter current

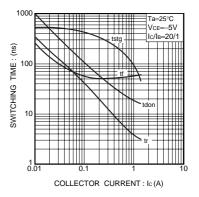


Fig.6 Switching time

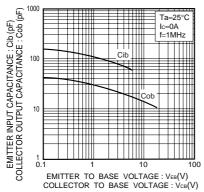


Fig.7 Collector output capacitance vs. collector-base voltage Emitter input capacitance vs. emitter-base voltage

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Appendix1-Rev1.1