# General purpose amplification (–30V, –1A) **2SB1710**

#### Application

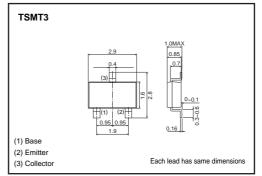
Low frequency amplifier Driver

#### Features

1) A collector current is large.

2) Collector saturation voltage is low. VCE(sat)  $\leq$  -350mV at Ic = -500mA / IB = -25mA

#### •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	Vebo	-6	V
Collector current	lc	-1	А
Collector current	Іср	-2	A*1
Power dissipation	Pc	500	mW*2
Junction temperature	Tj	150	°C
Range of storage temperature	Tstg	-55~+150	°C

\*1Single pulse, Pw=1ms

\*2Each Terminal Mounted on a Recommended

## •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	Veb=-6V
Collector-emitter saturation voltage	VCE(sat)	-	-150	-350	mV	Ic=-500mA, IB=-25mA
DC current gain	hfe	270	-	680	-	Vce=-2V, Ic=-100mA *
Transition frequency	f⊤	-	320	-	MHz	Vce=-2V, Ie=100mA, f=100MHz *
Corrector output capacitance	Cob	-	7	-	pF	Vcb=-10V, Ie=0A, f=1MHz

\* Pulsed

#### Packaging specifications

	Package	Taping
Туре	Code	TL
	Basic ordering unit (pieces)	3000
2SB1710		0

# 2SB1710

# Transistors

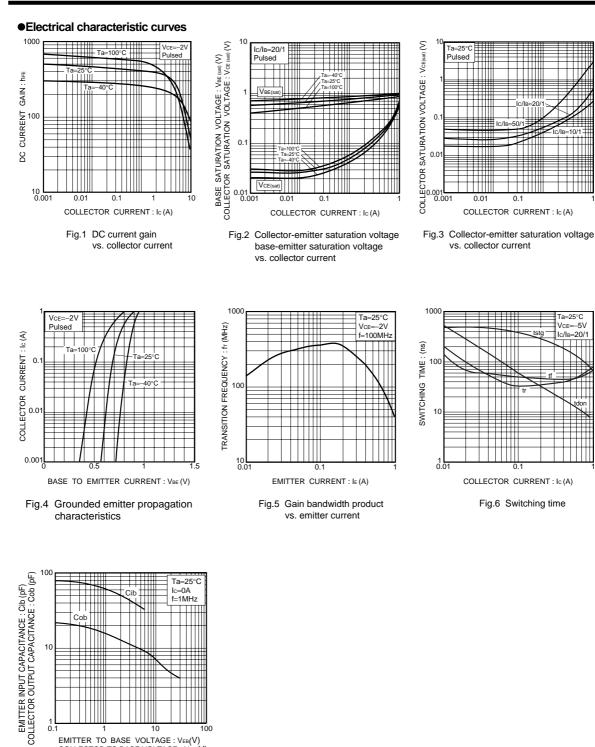
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EMITTER TO BASE VOLTAGE : VEB(V) COLLECTOR TO BASE VOLTAGE : VCB(V) Fig.7 Collector output capacitance vs. collector-base voltage Emitter input capacitance vs. emitter-base voltage

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