# Low frequency amplifier

# 2SD2670

### Application

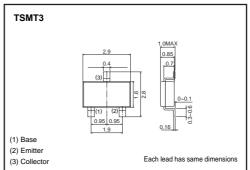
Low frequency amplifier Driver

# ● Features

1) A collector current is large.

2) V<sub>CE(sat)</sub>: max.250mV At  $Ic=1.5A/I_B=30mA$ 

# ●External dimensions (Unit: mm)



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

Parameter	Symbol	Limits	Unit
Collector-base voltage	Vсво	15	V
Collector-emitter voltage	Vceo	12	V
Emitter-base voltage	Vево	6	V
Collegator current	Ic	3	Α
Collector current	ICP	6	A*1
Power siddipation	Pc	500	mW
Fower siddipation	FC	1 *2	W
Junction temperature	Tj	150	°C
Range of storage temperature	Tstg	-55 to +150	°C
		·	

# ●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Collector-base breakdown voltage	ВУсво	15	_	_	V	Ic=10μA
Collector-emitter breakdown voltage	BVceo	12	_	_	V	Ic=1mA
Emitter-base breakdown voltage	ВУево	6	_	_	V	Iε=10μA
Collector cutoff current	Ісво	_	_	100	nA	Vcb=15V
Emitter cutoff current	<b>І</b> ЕВО	_	_	100	nA	V <sub>EB</sub> =6V
Collector-emitter saturation voltage	VcE(sat)	_	120	250	mV	Ic=1.5A, Iв=30mA
DC current gain	hfe	270	_	680	_	Vce=2V, Ic=500mA*
Transition frequency	f⊤	_	360	-	MHz	Vce=2V, Ie=-500mA, f=100MHz*
Collector output capacitance	Cob	_	30	_	pF	Vcb=10V, Ie=0A, f=1MHz

<sup>\*</sup> Pulse

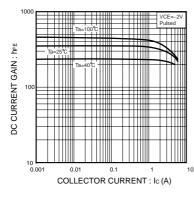


<sup>\*1</sup> Single pulse, Pw=1ms \*2 Mounted on a 25×25× $^{\rm t}$ 0.8mm Ceramic substrate

# Packaging specifications

	package	Taping
Туре	Code	TL
	Basic ordering unit (pieces)	3000
2SD2670		0

### •Electrical characteristic curves



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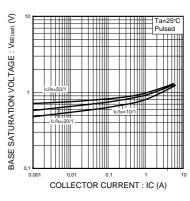


Fig.1 DC current gain vs. collector current

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

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

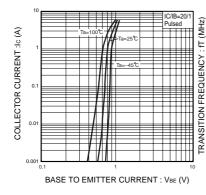


Fig.4 Grounded emitter propagation characteristics

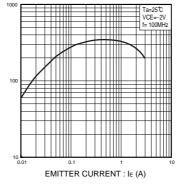


Fig.5 Gain bandwidth product vs. emitter current

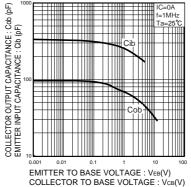


Fig.6 Collector output capacitance vs. collector-base voltage Emitter input capacitance vs. emitter-base voltage

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Appendix1-Rev1.1