# Low frequency amplifier

## 2SD2700

#### Application

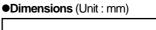
Low frequency amplifier Driver

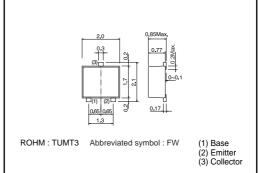
#### Features

1) A collector current is large.

2) VCE(sat)  $\leq$  180mV

at Ic =  $1A/I_B = 50mA$ 





#### ●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	Vebo	6	V	
Collector current	lc	2	А	
	ICP	4	A*1	
Bower dissipation	Pc	0.4	W	
Power dissipation	10	0.8*2	~~	
Junction temperature	Tj	150	°C	
Range of storage temperature	Tstg	-55 to +150	°C	
*1 Single pulse. Pw=1ms				

\*2 Mounted on a 25×25×<sup>t</sup>0.8mm Ceramic substrate

#### •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	ВVево	6	-	-	V	Iε=10μA
Collector cutoff current	Ісво	-	-	100	nA	Vcb=15V
Emitter cutoff current	Іево	-	-	100	nA	VEB=6V
Collector-emitter saturation voltage	VCE(sat)	-	90	180	mV	Ic=1A, IB=50mA
DC current gain	hfe	270	-	680	-	Vce=2V, Ic=200mA*
Transition frequency	f⊤	-	360	-	MHz	Vce=2V, Ie=-200mA, f=100MHz*
Corrector output capacitance	Cob	-	20	-	pF	Vcb=10V, Ie=0A, f=1MHz

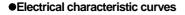
\* Pulsed

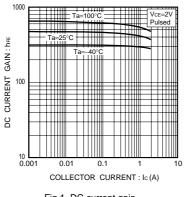
#### Packaging specifications

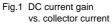
	Package	Taping
	Code	TL
Туре	Basic ordering unit (pieces)	3000
2SD2700		0

### 2SD2700

#### Transistors







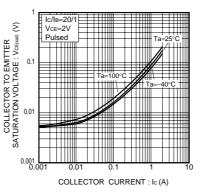


Fig.2 Base-emitter saturation voltage vs. collector current

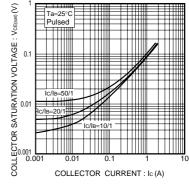


Fig.3 Collector-emitter saturation voltage vs. collector current

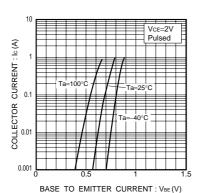


Fig.4 Grounded emitter propagation characteristics

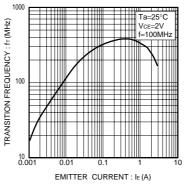
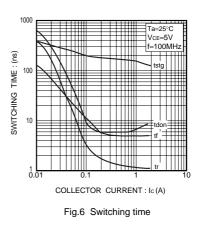
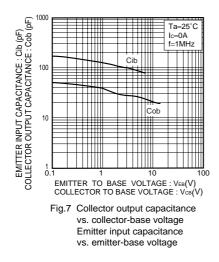


Fig.5 Gain bandwidth product vs. emitter current





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