Low frequency amplifier, storobo 25D2687S

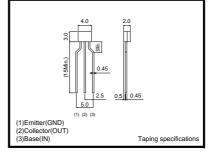
Application

Low frequency amplifier Storobo

Features

1) A collector current is large. 2) $V_{CE(sat)} \le 250mV$ 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	Vebo	6	V
Collector current	lc	5	А
Collector current	ICP	8	A *
Power siddipation	Pc	400	mW
Junction temperature	Tj	150	°C
Range of storage temperature	Tstg	-55 to +150	°C

* Single pulse, Pw=10ms

•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)	-	120	250	mV	Ic=1.5А, Iв=30mА
DC current gain	hfe	350	_	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

* Pulse

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Transistors

Packaging specifications

	package	Taping
Туре	Code	TP
	Basic ordering unit (pieces)	5000
2SD2687S		0

•Electrical characteristic curves

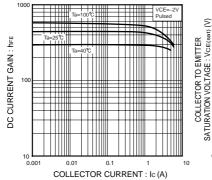
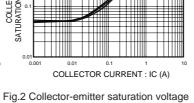


Fig.1 DC current gain vs. collector current



vs. collector current

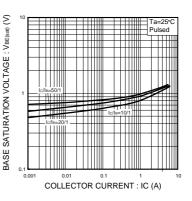


Fig.3 Base-emitter saturation voltage vs.collector current

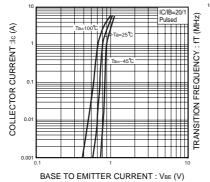
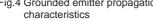


Fig.4 Grounded emitter propagation



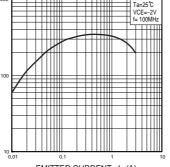
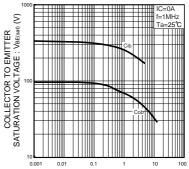




Fig.5 Gain bandwidth product vs. emitter current



EMITTER TO BASE VOLTAGE : VEB(V) COLLECTOR TO BASE VOLTAGE : VCB(V)

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

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