

General purpose small signal amplifier (50V, 0.15A) 2SC4617EB

Features

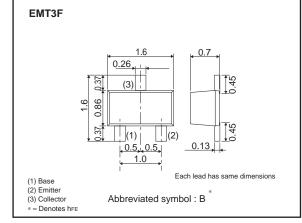
1) Excellent hre linearity.

2) Complements the 2SA1774EB.

Structure

NPN silicon epitaxial planar transistor

•Dimensions (Unit : mm)



•Absolute maximum (Ta=25°C)

Parameter	Symbol	Limits	Unit	
Collector-base voltage	Vсво	60	V	
Collector-emitter voltage	Vceo	50	V	
Emitter-base voltage	Vево	7	V	
	lc	150	mA	
Collector current	ICP *1	200		
Power dissipation	Po *2	150	mW	
Junction temperature	Tj	150	°C	
Range of storage temperature	Tstg	-55 to +150	°C	

*1 Pw=1ms Single pulse *2 Each terminal mounted on a recommended land

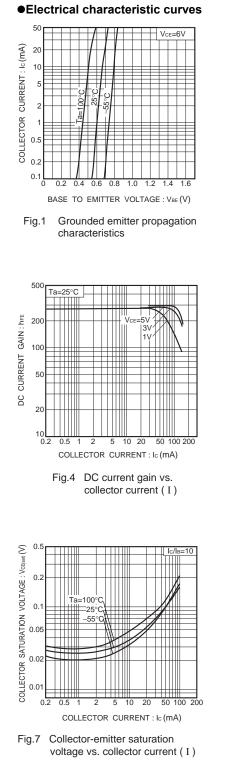
•Electrical characteristics (Ta=25°C)

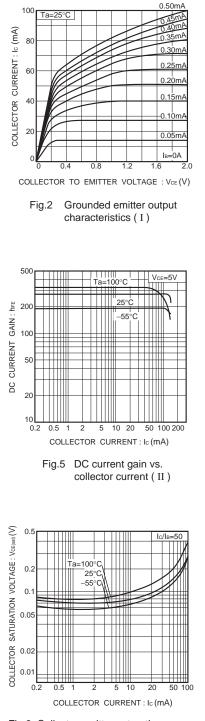
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Collector-emitter breakdown voltage	BVCEO	50	-	-	V	Ic=1mA
Collector-base breakdown voltage	ВУсво	60	_	-	V	Ic=50μA
Emitter-base breakdown voltage	BVEBO	7	_	_	V	Iε=50μA
Collector cutoff current	Ісво	-	-	100	nA	Vcb=60V
Emitter cutoff current	Іево	-	_	100	nA	V _{EB} =7V
Collector-emitter saturation voltage	VCE(sat)	_	_	400	mV	Ic/I _B =50mA/5mA
DC current gain	hfe	120	_	390	_	Vce=6V, Ic=1mA
Transition frequency	f⊤	_	180	_	MHz	Vce=12V, Ie=-2mA, f=100MHz
Output capacitance	Cob	_	2	3.5	pF	Vce=12V, Ie=0A, f=1MHz

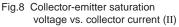
hFE rank categories

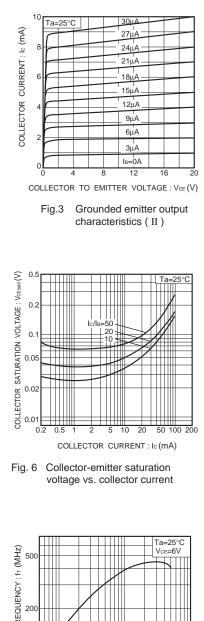
Rank	Q	R
hfe	120 to 270	180 to 390

2SC4617EB









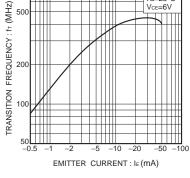
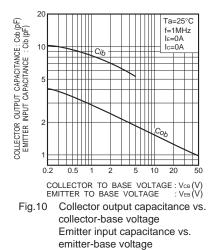


Fig.9 Gain bandwidth product vs. emitter current



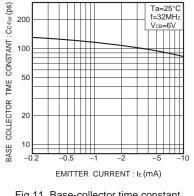


Fig.11 Base-collector time constant vs. emitter current

	Notes
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