

Low Frequency Transistor (20V, 3A) 25C41155

Features

1) Low VCE(sat).

 $V_{CE(sat)} = 0.2V(Typ.)$

- $(I_{C} / I_{B} = 2A / 0.1A)$
- 2) Excellent current gain characteristics.
- 3) Complements the 2SA1585S.

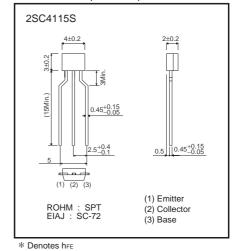
Structure

Epitaxial planar type NPN silicon transistor

•Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	Vсво	40	V
Collector-emitter voltage	VCEO	20	V
Emitter-base voltage	Vebo	6	V
O alla stan sumant		2	A (DC)
Collector current	lc	5	A (Pulse) *
Collector power dissipation	Pc	0.4	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	٥C

•Dimensions(Unit:mm)



* Single pulse Pw=10ms

•Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions	
Collector-base breakdown voltage	ВУсво	40	_	-	V	Ic=50μA	
Collector-emitter breakdown voltage	BVCEO	20	-	-	V	Ic=1mA	
Emitter-base breakdown voltage	ВVево	6	-	-	V	Ιε=50μΑ	
Collector cutoff current	Ісво	-	_	0.1	μA	Vcb=30V	
Emitter cutoff current	Іево	_	_	0.1	μΑ	Veb=5V	
Collector-emitter saturation voltage	VCE(sat)	-	0.2	0.5	V	Ic/Iв=2А/0.1А	*
DC current transfer ratio	hfe	120	_	390	_	Vce=2V, Ic=0.1A	
Transition frequency	fт	_	290	-	MHz	Vce=2V, Ie=-0.5A, f=100MHz	
Output capacitance	Cob	-	25	-	pF	Vce=10V, Ie=0A, f=1MHz	

* Measured using pulse current.

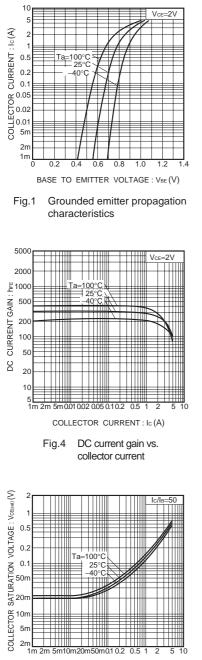
Packaging specifications and hre

		Package	Taping
		Code	TP
Туре	hfe	Basic ordering unit (pieces)	5000
2SC4115S	QRS		0

hFE values are classified as follows :

Item	Q	R	S
hfe	120 to 270	180 to 390	270 to 560

•Electrical characteristic curves



COLLECTOR CURRENT : Ic (A)

Fig.7 Collector-emitter saturation voltage vs. collector current (III)

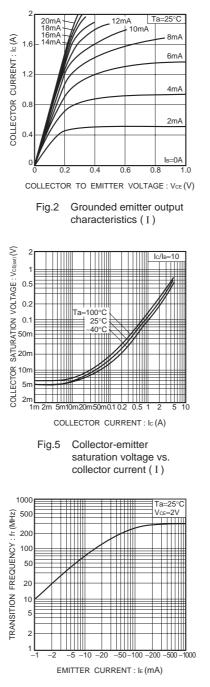
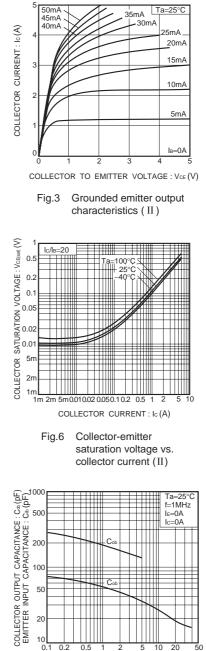


Fig.8 Gain bandwidth product vs. emitter current



COLLECTOR TO BASE VOLTAGE : Vcs (V) EMITTER TO BASE VOLTAGE : Vcs (V) Fig.9 Collector output capacitance vs. collector-base voltage Emitter input capacitance vs. emitter-base voltage

	Notes
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