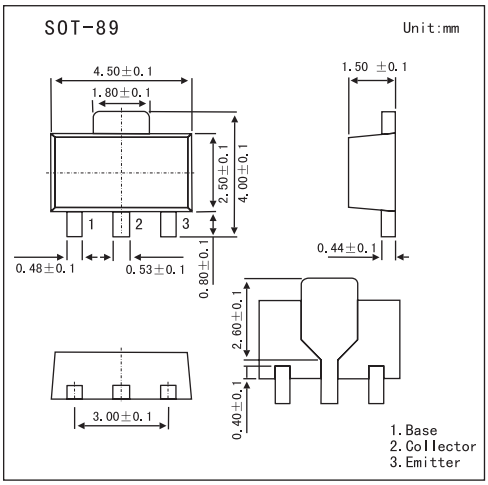
Low Frequency Transistor

2SC4115



Features

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

  I_C / I_B = 2A / 0.1A
- NPN silicon transistor

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
collector-base voltage	V_{CBO}	40	V
collector-emitter voltage	V_{CEO}	20	V
emitter-base voltage	V_{EBO}	6	V
collector current	I_C	3	A
	I_{CP} *1	5	A
CollectorPower Dissipation	P_C	0.3	W
Junotion Temperature	T_J	150	℃
storage Temperature	T_{stg}	-55 to 150	℃

*1 Single pulse pw=10ms

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	I_C=50μA	40			V
collector-emitter breakdown voltage	V_{CEO}	I_C=1mA	20			V
Emitter-base breakdown voltage	V_{EBO}	I_E=50μA	6			V
Collector cutoff current	I_{CBO}	V_{CB}=30V			0.1	μA
Emitter outoff current	I_{EBO}	V_{EB}=5V			0.1	μA
Collector emitter saturation voltage	$V_{CE(sat)}$	I_C/I_B=2A/0.1A		0.2	0.5	V
DC current gain	h_{FE}	V_{CE}=2V,I_C=0.1A	120		560	
Output capacitance	C_{ob}	V_{CB}=10V,I_E=0A,f=1MHz		25		pF
Transition frequency	f_T	V_{CE}=2V.I_E=0.5A,f=100MHz		290		MHz

h_{FE} Classification

Rank	Q	R	S
hFE	120～ 270	180 ～ 390	270 ～560