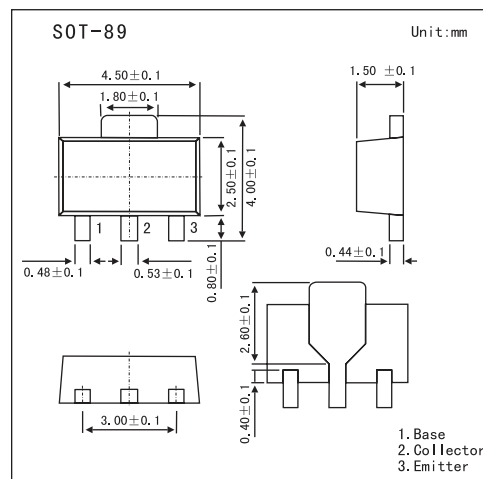


Low Frequency Transistor

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 $T_a = 25^\circ C$

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
Junction Temperature	T_J	150	$^\circ C$
storage Temperature	T_{stg}	-55 to 150	$^\circ C$

*1 Single pulse $p_w=10ms$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C=50\mu A$	40			V
collector-emitter breakdown voltage	V_{CEO}	$I_C=1mA$	20			V
Emitter-base breakdown voltage	V_{EBO}	$I_E=50\mu A$	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
h_{FE}	120 ~ 270	180 ~ 390	270 ~ 560