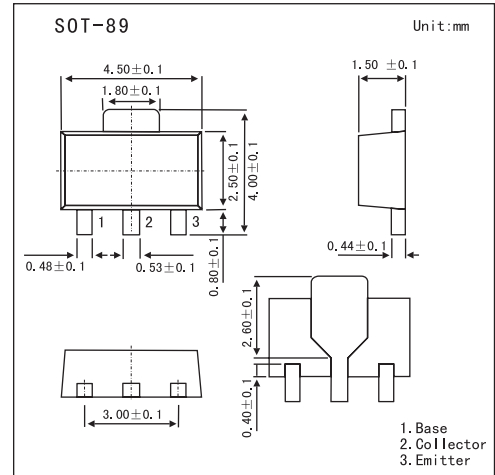


## Low Frequency Transistor

### 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	$\mu A$
Emitter outoff current	$I_{EBO}$	$V_{EB}=5V$			0.1	$\mu A$
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