



SOT-89-3L Plastic-Encapsulate Transistors

2SC4115 TRANSISTOR (NPN)

FEATURES

- LOW $V_{CE(sat)}$ $V_{CE(sat)} = 0.2V$ (Typ.) ($I_C / I_B = 2A / 0.1A$)
- Excellent current gain characteristics.
- Complements to 2SA1585

MAXIMUM RATINGS ($T_a=25^\circ C$ unless otherwise noted)

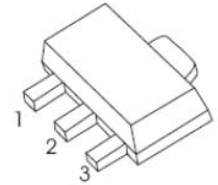
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	20	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	3	A
P_C	Collector Power Dissipation	500	mW
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

SOT-89-3L

1. BASE

2. COLLECTOR

3. EMITTER



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 50\mu A, I_E = 0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, I_B = 0$	20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 50\mu A, I_C = 0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB} = 30V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			0.1	μA
DC current gain	h_{FE}	$V_{CE} = 2V, I_C = 0.1A$	120		560	
Collector-emitter saturation voltage*	$V_{CE(sat)}$	$I_C = 2A, I_B = 0.1A$			0.5	V
Transition frequency	f_T	$V_{CE} = 2V, I_C = 0.5A$ $F = 100MHz$	200	290		MHz

*pulse test

CLASSIFICATION OF h_{FE}

Rank	Q	R	S
Range	120-270	180-390	270-560
marking	4115Q	4115R	4115S