

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

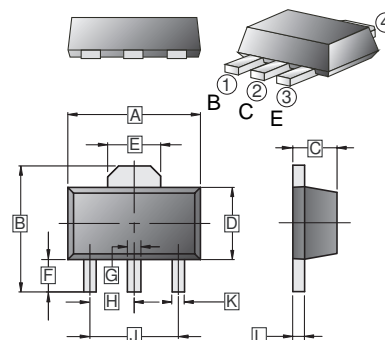
FEATURES

- Small Flat Package
- General Purpose Application
- Low $V_{CE(sat)}$. $V_{CE(sat)} = 0.2V$ (Typ.) ($I_C / I_B = 2A / 0.1A$)

CLASSIFICATION OF $h_{FE(1)}$

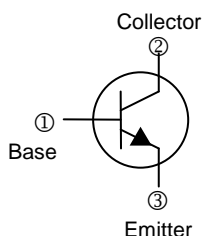
Product-Rank	2SC4115-Q	2SC4115-R	2SC4115-S
Range	120~270	180~390	270~560
Marking	4115Q	4115R	4115S

SOT-89



PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-89	1K	7 inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.60	G	0.40	0.58
B	3.94	4.25	H	1.50	TYP
C	1.40	1.60	J	3.00	TYP
D	2.25	2.60	K	0.32	0.52
E	1.50	1.85	L	0.35	0.44
F	0.89	1.20			

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ C$ unless otherwise specified)

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-Continuous	I_C	3	A
Collector Power Dissipation	P_C	500	mW
Junction & Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ C$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	40	-	-	V	$I_C=50\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	20	-	-	V	$I_C=1mA, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	6	-	-	V	$I_E=50\mu A, I_C=0$
Collector Cut-Off Current	I_{CBO}	-	-	0.1	μA	$V_{CB}=30V, I_E=0$
Emitter Cut-Off Current	I_{EBO}	-	-	0.1	μA	$V_{EB}=5V, I_C=0$
DC Current Gain	h_{FE}	120	-	560		$V_{CE}=2V, I_C=100mA$
Collector-Emitter Saturation voltage	$V_{CE(sat)}$	-	-	0.5	V	$I_C=2A, I_B=100mA$
Transition Frequency	f_T	200	290	-	MHz	$V_{CE}=2V, I_C=500mA, f=100MHz$