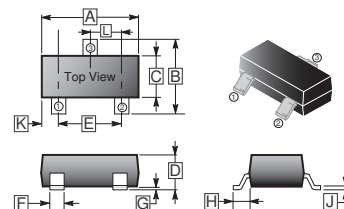


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- High  $I_{CMax}$ .  $I_{CMax}=0.5A$ .
- Low  $V_{CE(sat)}$ . Optimal for low voltage operation.
- Complementary to 2SA1577

## SOT-323



## MECHANICAL DATA

- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Mounting Position: Any

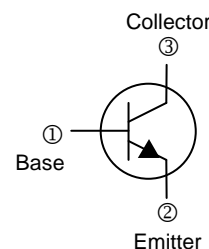
## CLASSIFICATION OF $h_{FE}$

Product-Rank	2SC4097-P	2SC4097-Q	2SC4097-R
Range	82~180	120~270	180~390
Marking	CP	CQ	CR

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.80	2.20	G	0.100 REF.	
B	1.80	2.45	H	0.525 REF.	
C	1.15	1.35	J	0.08	0.25
D	0.80	1.10	K	-	-
E	1.20	1.40	L	0.650 TYP.	
F	0.20	0.40			

## PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-323	3K	7' inch



## 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	$V_{CEO}$	32	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	500	mA
Collector Power Dissipation	$P_C$	200	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	$I_C=100\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	32	-	-	V	$I_C=1mA, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	$I_E=100\mu A, I_C=0$
Collector Cut-Off Current	$I_{CBO}$	-	-	1	$\mu A$	$V_{CB}=20V, I_E=0$
Emitter Cut-off Current	$I_{EBO}$	-	-	1	$\mu A$	$V_{EB}=4V, I_C=0$
DC Current Gain	$h_{FE}$	82	-	390		$V_{CE}=3V, I_C=10mA$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.4	V	$I_C=500mA, I_B=50mA$
Transition Frequency	$f_T$	-	250	-	MHz	$V_{CE}=5V, I_C=20mA, f=100MHz$
Collector Output Capacitance	$C_{ob}$	-	6	-	pF	$V_{CB}=10V, I_E=0, f=1MHz$

**CHARACTERISTIC CURVES**

