

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

## FEATURES

- Low Collector Capacitance.
- High Gain.

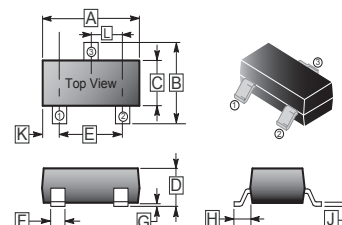
## CLASSIFICATION OF $h_{FE}$

Product-Rank	2SC4098-N	2SC4098-P	2SC4098-Q
Range	56~120	82~180	120~270
Marking	AN	AP	AQ

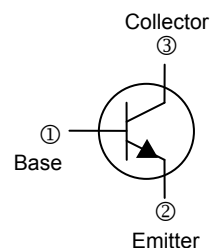
## PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-323	3K	7' inch

## SOT-323



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			



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

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CBO}$	40	V
Collector-Emitter Voltage	$V_{CEO}$	25	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	50	mA
Collector Power Dissipation	$P_C$	200	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	625	$^\circ\text{C} / \text{W}$
Junction & Storage temperature	$T_J, T_{STG}$	150, -55~150	$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	40	-	-	V	$I_C=50\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	25	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	$I_E=50\mu\text{A}, I_C=0$
Collector Cut-Off Current	$I_{CBO}$	-	-	500	nA	$V_{CB}=24\text{V}, I_E=0$
Emitter Cut-off Current	$I_{EBO}$	-	-	500	nA	$V_{EB}=3\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	56	-	270		$V_{CE}=6\text{V}, I_C=1\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.3	V	$I_C=10\text{mA}, I_B=1\text{mA}$
Transition Frequency	$f_T$	150	-	-	MHz	$V_{CE}=6\text{V}, I_C=1\text{mA}, f=100\text{MHz}$
Collector Output Capacitance	$C_{ob}$	-	-	2.2	pF	$V_{CB}=6\text{V}, I_E=0, f=1\text{MHz}$