

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

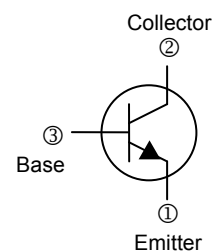
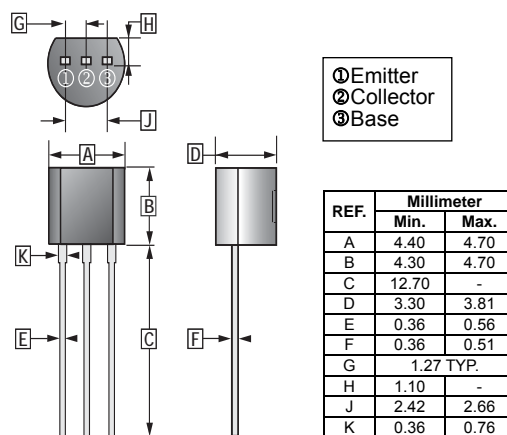
## FEATURES

- General Purpose Switching and Amplification

## CLASSIFICATION OF $h_{FE}$

Product-Rank	2SC1923-R	2SC1923-O	2SC1923-Y
Range	40~80	70~140	100~200

## TO-92



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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	40	V
Collector to Emitter Voltage	$V_{CEO}$	30	V
Emitter to Base Voltage	$V_{EBO}$	4	V
Collector Current - Continuous	$I_C$	20	mA
Collector Power Dissipation	$P_C$	100	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	1250	$^\circ\text{C} / \text{W}$
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 Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	40	-	-	V	$I_C=0.1\text{mA}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	30	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	4	-	-	V	$I_E=0.1\text{mA}, I_C=0$
Collector Cut - Off Current	$I_{CBO}$	-	-	0.5	$\mu\text{A}$	$V_{CB}=18\text{V}, I_E=0$
Emitter Cut - Off Current	$I_{EBO}$	-	-	0.5	$\mu\text{A}$	$V_{EB}=4\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	40	-	200		$V_{CE}=6\text{V}, I_C=1\text{mA}$
Transition Frequency	$f_T$	-	550	-	MHz	$V_{CE}=6\text{V}, I_C=1\text{mA}$