

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

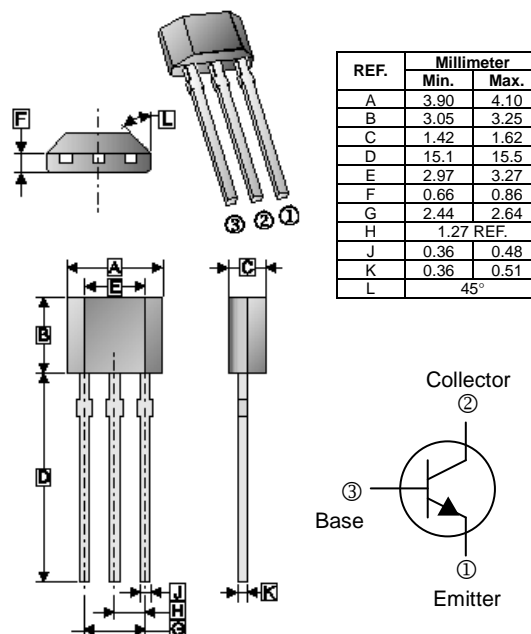
## FEATURES

- Low  $C_{ob}$

## TO-92S

## CLASSIFICATION OF $h_{FE}$

Product-Rank	2SC1740S-Q	2SC1740S-R	2SC1740S-S
Range	120~270	180~390	270~560



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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	60	V
Collector to Emitter Voltage	$V_{CEO}$	50	V
Emitter to Base Voltage	$V_{EBO}$	7	V
Collector Current - Continuous	$I_C$	150	mA
Collector Power Dissipation	$P_C$	300	mW
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 to Base Breakdown Voltage	$V_{(BR)CBO}$	60	-	-	V	$I_C=50\mu\text{A}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	50	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	7	-	-	V	$I_E=50\mu\text{A}, I_C=0$
Collector Cut-Off Current	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	$V_{CB}=60\text{V}, I_E=0$
Emitter Cut-Off Current	$I_{EBO}$	-	-	0.1	$\mu\text{A}$	$V_{EB}=7\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	120	-	560		$V_{CE}=6\text{V}, I_C=1\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.4	V	$I_C=50\text{mA}, I_B=5\text{mA}$
Collector Output Capacitance	$C_{ob}$	-	2	3.5	pF	$V_{CB}=12\text{V}, I_E=0, f=1\text{MHz}$
Transition Frequency	$f_T$	100	-	-	MHz	$V_{CE}=12\text{V}, I_C=-2\text{mA}, f=100\text{MHz}$

**CHARACTERISTIC CURVES**

Static Characteristic

