

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

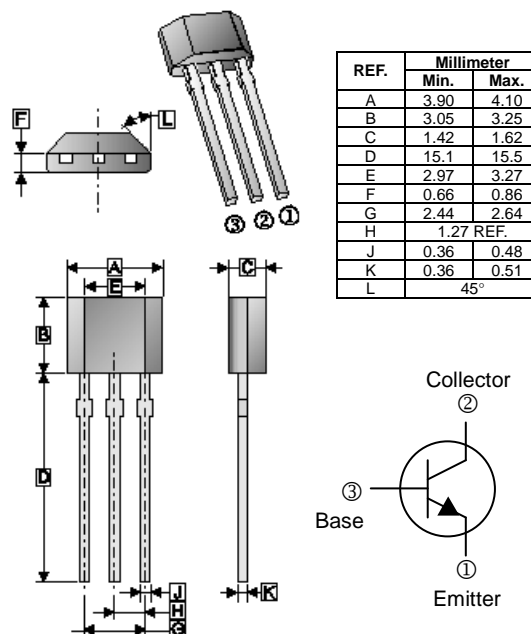
FEATURES

- 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	μA	$V_{CB}=60\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EBO}	-	-	0.1	μA	$V_{EB}=7\text{V}, I_C=0$
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

