

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

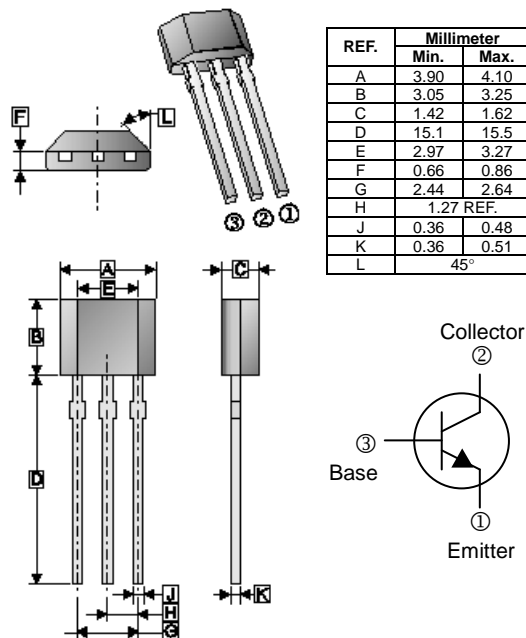
FEATURES

- Small Reverse Transfer Capacitance.
- Low Noise Figure.

CLASSIFICATION OF h_{FE}

Product-Rank	2SC2668-R	2SC2668-O	2SC2668-Y
Range	40~80	70~140	100~200

TO-92S



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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CB0}	40	V
Collector to Emitter Voltage	V_{CE0}	30	V
Emitter to Base Voltage	V_{EB0}	4	V
Collector Current - Continuous	I_C	20	mA
Collector Power Dissipation	P_C	200	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	$V_{(BR)CB0}$	40	-	-	V	$I_C=100\mu\text{A}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CE0}$	30	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EB0}$	4	-	-	V	$I_E=100\mu\text{A}, I_C=0$
Collector Cut-Off Current	I_{CB0}	-	-	0.5	μA	$V_{CB}=40\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EB0}	-	-	0.5	μA	$V_{EB}=4\text{V}, I_C=0$
DC Current Gain	h_{FE}	40	-	200		$V_{CE}=6\text{V}, I_C=1\text{mA}$
Reverse Transfer Capacitance	C_{re}	-	0.7	-	pF	$V_{CE}=6\text{V}, f=1\text{MHz}$
Collector-Base Time Constant	$C_C \cdot \tau_{bb}$	-	-	30	pS	$V_{CE}=6\text{V}, I_E=-1\text{mA}, f=30\text{MHz}$
Transition Frequency	f_T	-	550	-	MHz	$V_{CE}=6\text{V}, I_C=1\text{mA}$
Power Gain	G_{pe}	-	18	-	dB	$V_{CC}=6\text{V}, I_C=1\text{mA}, f=100\text{MHz}$
Noise Figure	NF	-	-	5	dB	

CHARACTERISTIC CURVES

