歌达电子
GD-electronics

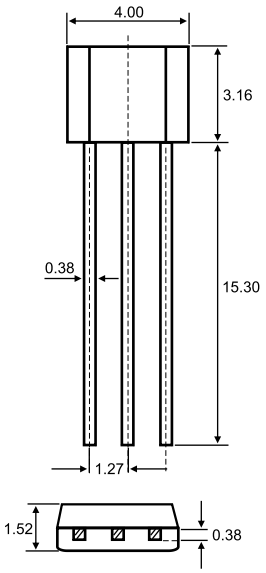
2SC2668

TO-92S Transistor (NPN)

1 2 3

1. EMITTER
2. COLLECTOR
3. BASE

TO-92S



Dimensions in inches and (millimeters)

Features

- ✧ Small reverse transfer capacitance
- ✧ Low Noise Figure

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current -Continuous	20	mA
P_C	Collector Power Dissipation	200	mW
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C =100μA, I_E=0	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C =1mA, I_B=0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA, I_C=0	4			V
Collector cut-off current	I_{CBO}	V_{CB}=40V, I_E=0			0.5	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V, I_C=0			0.5	μA
DC current gain	h_{FE}	V_{CE}=6V, I_C=1mA	40		200	
Reverse Transfer Capacitance	C_{re}	V_{CE}=6V, f=1MHz		0.7		pF
Collector-Base Time Constant	Cc • rbb'	V_{CE}=6V, I_E=-1mA, f=30MHz			30	ps
Transition frequency	f_T	V_{CE}=6V, I_C=1mA		550		MHz
Power Gain	Gpe	V_{CC}=6V, I_C =1mA, f=100MHz		18		dB
Noise figure	NF	V_{CC}=6V, I_C =1mA, f=100MHz			5	dB

CLASSIFICATION OF h_{FE}

Rank	R	O	Y
Range	40-80	70-140	100-200

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Typical Characteristics