

isc Silicon NPN RF Transistor

2SC2026

DESCRIPTION

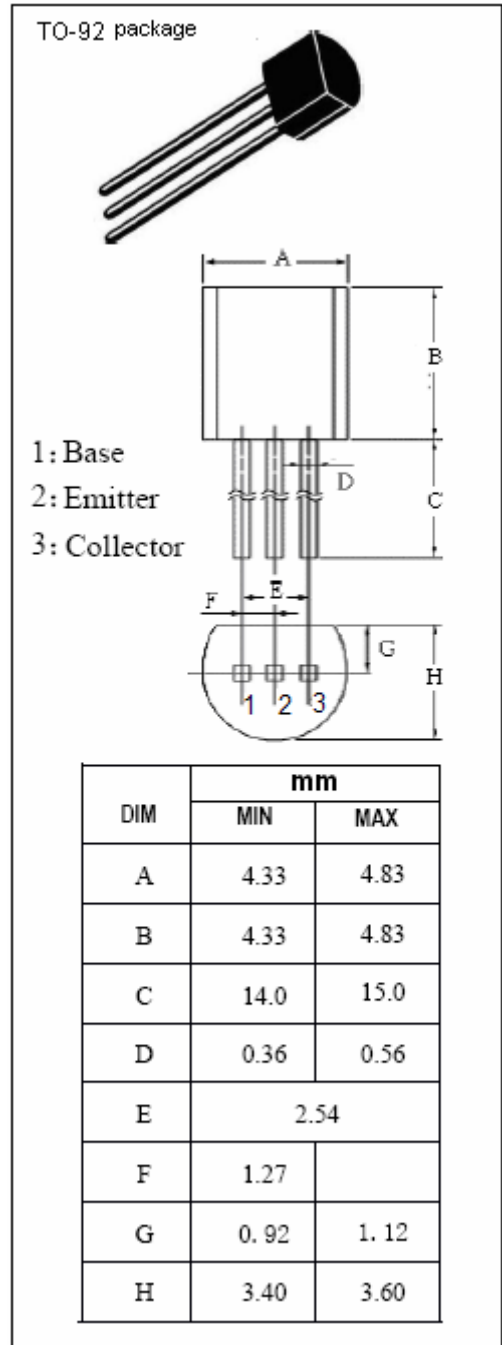
- Low Noise
 $NF = 3.0\text{dB TYP. @ } f = 500\text{MHz}$
- High Power Gain
 $G_{pe} = 15\text{dB TYP. @ } f = 500\text{MHz}$
- High Gain Bandwidth Product
 $f_T = 2.0\text{GHz TYP.}$

APPLICATIONS

- Designed for use in low noise amplifiers in the VHF~UHF band.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	14	V
V_{EBO}	Emitter-Base Voltage	3	V
I_C	Collector Current-Continuous	50	mA
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	0.25	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I _{CBO}	Collector Cutoff Current	V _{CB} = 15V; I _E = 0			0.1	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 2V; I _C = 0			0.1	μ A
h _{FE}	DC Current Gain	I _C = 10mA ; V _{CE} = 10V	25		200	
f _T	Current-Gain—Bandwidth Product	I _C = 10mA ; V _{CE} = 10V	15	2.0		GHz
C _{OB}	Output Capacitance	I _E = 0 ; V _{CB} = 10V; f= 1.0MHz		0.75	1.1	pF
G _{pe}	Power Gain	V _{CE} = 10 V, I _C = 10mA; f= 500MHz	13	15		dB
NF	Noise Figure	V _{CE} = 10 V, I _C = 3mA; f= 500MHz; R _G = 50 Ω		3	4	dB