isc Silicon NPN RF Transistor 2SC2026

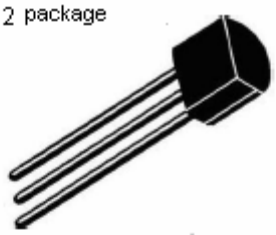
DESCRIPTION

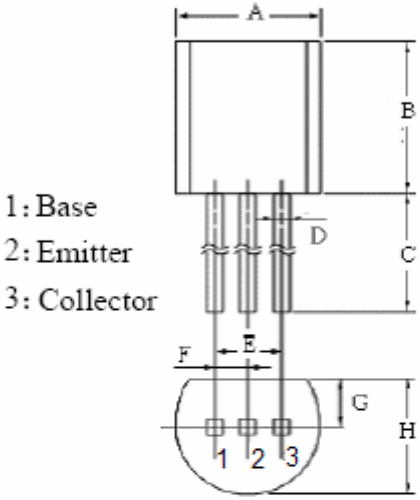
- Low Noise
  NF= 3.0dB TYP. @ f= 500MHz
- High Power Gain
  G_{pe}= 15dB TYP. @ f= 500MHz
- High Gain Bandwidth Product
  f_T= 2.0GHz TYP.

APPLICATIONS

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

TO-92 package





DIM	mm	
	MIN	MAX
A	4.33	4.83
B	4.33	4.83
C	14.0	15.0
D	0.36	0.56
E	2.54	
F	1.27	
G	0. 92	1. 12
H	3.40	3.60

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

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℃	0.25	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I_{CBO}	Collector Cutoff Current	V_{CB}= 15V; I_E= 0			0.1	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 2V; I_C= 0			0.1	μA
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= 50Ω		3	4	dB