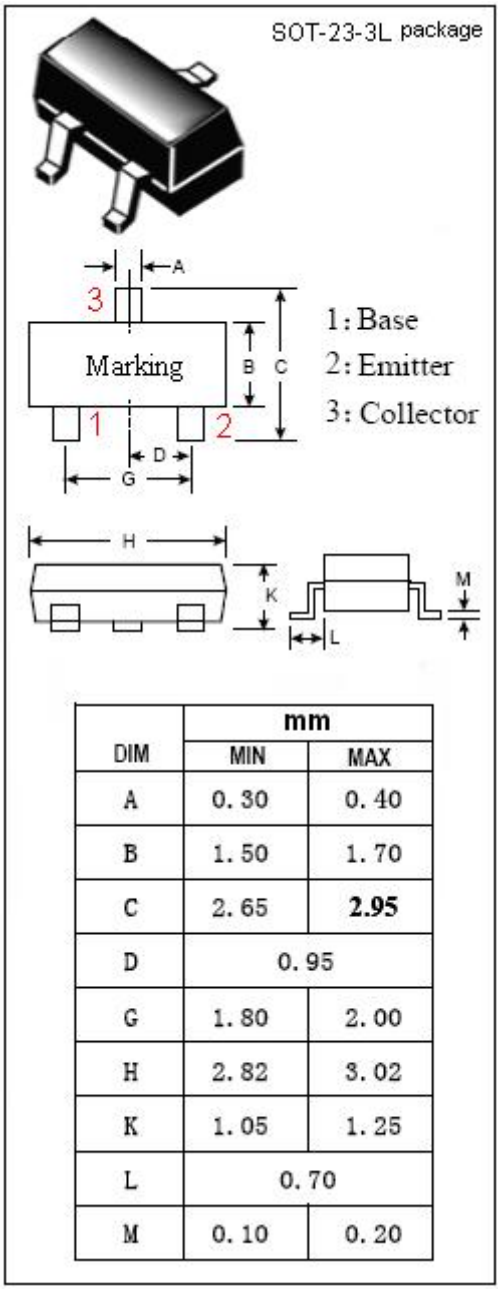
isc Silicon NPN RF Transistor 2SC5064

DESCRIPTION

- Low Noise and High Gain
  NF = 1.1 dB TYP., $|S_{21e}|^2$= 12 dB TYP.
  @V_{CE} = 5 V, f = 1.0 GHz
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for VHF~UHF band low noise amplifier applications.



DIM	mm MIN	mm MAX
A	0.30	0.40
B	1.50	1.70
C	2.65	2.95
D	0.95	
G	1.80	2.00
H	2.82	3.02
K	1.05	1.25
L	0.70	
M	0.10	0.20

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	20	V
V_{CEO}	Collector-Emitter Voltage	12	V
V_{EBO}	Emitter-Base Voltage	3.0	V
I_C	Collector Current-Continuous	30	mA
I_B	Base Current-Continuous	15	mA
P_C	Collector Power Dissipation @T_C=25℃	0.15	W
T_J	Junction Temperature	125	℃
T_{stg}	Storage Temperature Range	-55~125	℃

isc Silicon NPN RF Transistor 2SC5064

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I_{CBO}	Collector Cutoff Current	V_{CB}= 10V; I_E= 0			1.0	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 1V; I_C= 0			1.0	μA
h_{FE}	DC Current Gain	I_C= 10mA ; V_{CE}= 5V	80		240	
f_T	Current-Gain—Bandwidth Product	I_C= 10mA ; V_{CE}= 5V	5	7		GHz
C_{re}	Feed-Back Capacitance	I_E= 0 ; V_{CB}= 5V; f= 1.0MHz		0.45	0.9	pF
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 5V; f= 1.0MHz		0.7		pF
$\|S_{21e}\|^2$	Insertion Power Gain	I_C= 10mA ; V_{CE}= 5V;f= 500MHz		17		dB
$\|S_{21e}\|^2$	Insertion Power Gain	I_C= 10mA ; V_{CE}= 5V;f= 1.0GHz	8.5	12		dB
NF	Noise Figure	I_C= 3mA ; V_{CE}= 5V;f= 500MHz		1		dB
NF	Noise Figure	I_C= 3mA ; V_{CE}= 5V;f= 1.0GHz		1.1	2.0	dB

◆ **h_{FE} Classification**

O	Y
80-160	120-240

isc Silicon NPN RF Transistor 2SC5064

NOTICE：

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.