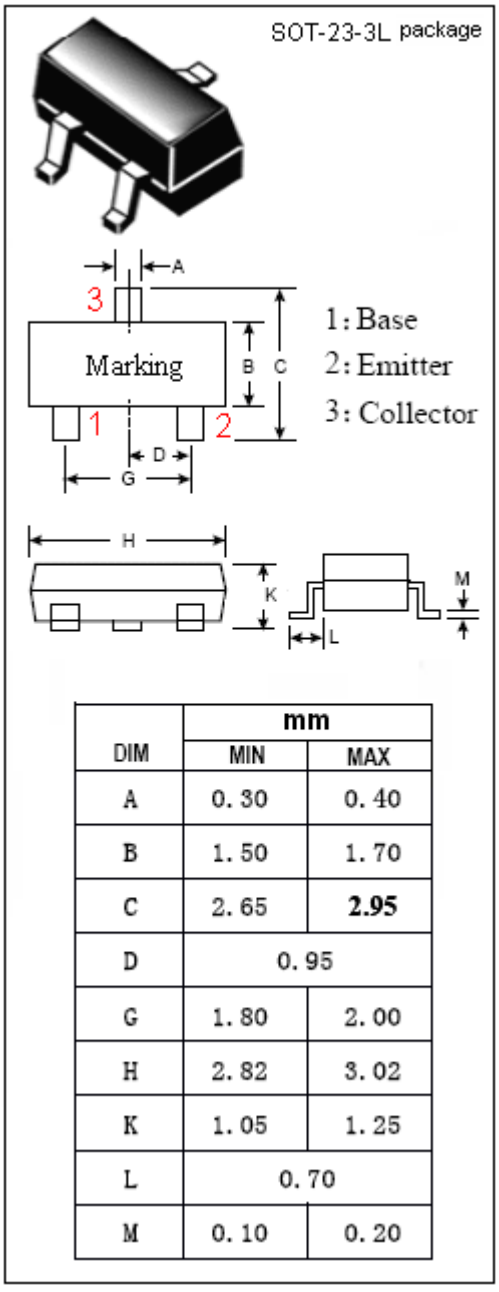
isc Silicon NPN RF Transistor 2SC2351

DESCRIPTION

- Low Noise
  NF = 1.5 dB TYP. ; @ f = 1 GHz
- High Maximum Available Gain
  MAG = 14 dB TYP. ; @ f = 1 GHz

APPLICATIONS

- Designed for use as UHF oscillators and a UHF mixer in a tuner of a TV receiver.



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	25	V
V_{CEO}	Collector-Emitter Voltage	12	V
V_{EBO}	Emitter-Base Voltage	3	V
I_C	Collector Current-Continuous	70	mA
P_C	Collector Power Dissipation @T_C=25℃	0.25	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

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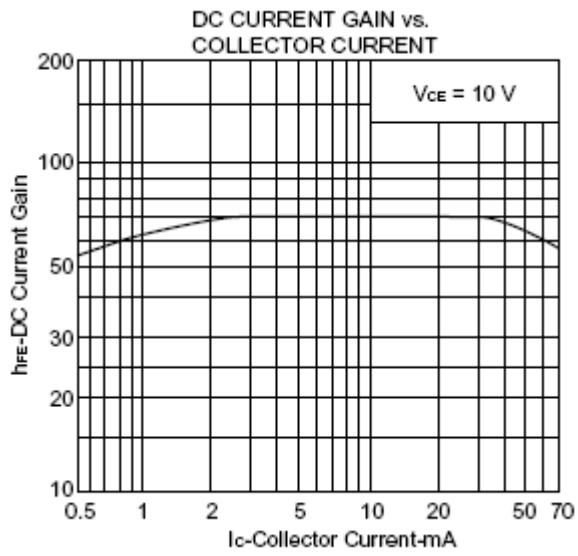
ELECTRICAL CHARACTERISTICS

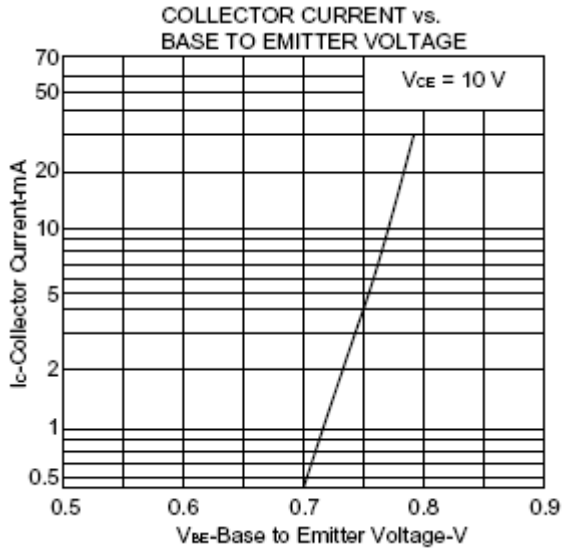
T_C=25℃ unless otherwise specified

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}= 2.0V; I_C= 0			0.1	μA
h_{FE}	DC Current Gain	I_C= 20mA ; V_{CE}= 10V	40		200	
f_T	Current-Gain—Bandwidth Product	I_C= 20mA;V_{CE}= 10V		4.5		GHz
C_{OB}	Output Capacitance	I_E= 0 ; V_{CB}= 10V; f= 1MHz		0.75	1.0	pF
$\|S_{21e}\|^2$	Insertion Power Gain	I_C= 20mA ; V_{CE}= 10V;f= 1.0GHz	9	11		dB
NF	Noise Figure	I_C= 5mA ; V_{CE}= 10V;f= 1.0GHz		1.5	3.0	dB
MAG	Maximum Available Gain	I_C= 20mA ; V_{CE}= 10V;f= 1.0GHz		14		dB

◆ **h_{FE} Classification**

Class	E/P	F/Q
Marking	R2	R3
h_{FE}	40-120	100-200





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