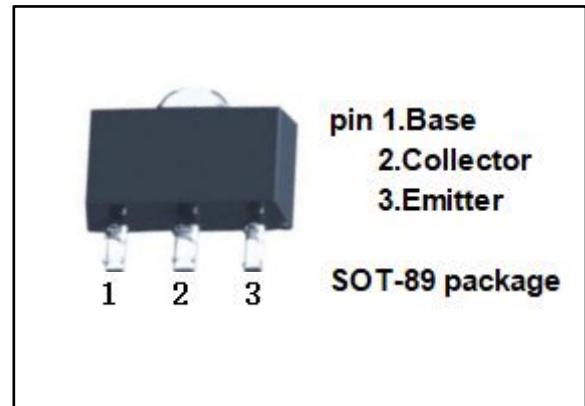


isc Silicon NPN RF Transistor

2SC3357

DESCRIPTION

- Low Noise and High Gain
NF = 1.7 dB TYP.
@ $V_{CE} = 10\text{ V}$, $I_C = 7\text{ mA}$, $f = 1.0\text{ GHz}$
NF = 2.6dB TYP.
@ $V_{CE} = 10\text{ V}$, $I_C = 40\text{ mA}$, $f = 1.0\text{ GHz}$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for low noise amplifier at VHF, UHF and CATV band.

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

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	0.1	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	1.2	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$

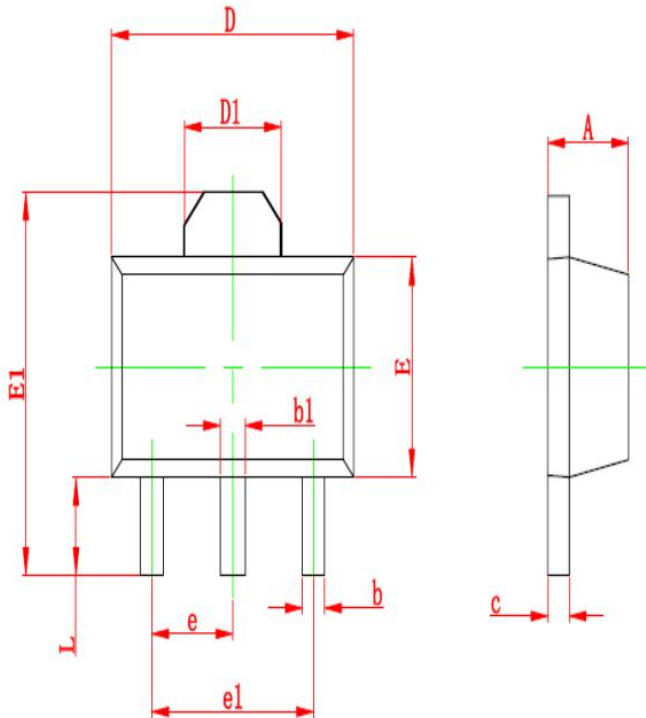
isc Silicon NPN RF Transistor
2SC3357
ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I _{CB0}	Collector Cutoff Current	V _{CB} = 10V; I _E = 0			1.0	μ A
I _{EB0}	Emitter Cutoff Current	V _{EB} = 1V; I _C = 0			1.0	μ A
h _{FE}	DC Current Gain	I _C = 20mA ; V _{CE} = 10V	60		300	
f _T	Current-Gain—Bandwidth Product	I _C = 20mA ; V _{CE} = 10V		6.5		GHz
C _{re}	Feed-Back Capacitance	I _E = 0 ; V _{CB} = 10V;f= 1.0MHz		0.65	1.0	pF
S _{21e} ²	Insertion Power Gain	I _C = 20mA ; V _{CE} = 10V;f= 1.0GHz	9	10		dB
NF	Noise Figure	I _C = 7mA ; V _{CE} = 10V;f= 1.0GHz		1.7	2.3	dB
NF	Noise Figure	I _C = 40mA ; V _{CE} = 10V;f= 1.0GHz		2.6	3.2	dB

◆ h_{FE} Classification

Marking	RH	RF	RE
h _{FE}	60-100	90-140	130-300



符号	最小值 (mm)	最大值 (mm)
A	1.4	1.6
b	0.32	0.52
b1	0.4	0.58
c	0.35	0.44
D	4.4	4.6
D1	1.55	
E	2.3	2.6
E1	3.94	4.25
e	1.5	
e1	3	
L	0.9	1.2

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