

isc Silicon NPN RF Transistor

DESCRIPTION

- High Current-Gain—Bandwidth Product f_T = 5.0 GHz TYP. @V_{CE} = 5 V, I_C = 5 mA, f = 1.0 GHz
- Low C_{OB} 0.9pF TYP. $@V_{CB} = 5 \text{ V}, I_E = 0, f = 1.0 \text{ MHz}$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

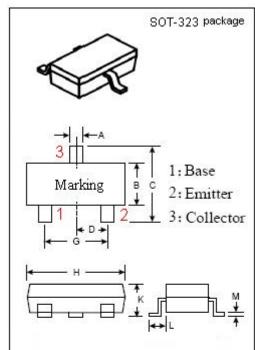


APPLICATIONS

· Designed for use in UHF oscillator and mixer.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	20	V
Vceo	Collector-Emitter Voltage	12	V
V _{EBO}	Emitter-Base Voltage	3.0	V
lc	Collector Current-Continuous	60	mA
Pc	Collector Power Dissipation @Tc=25℃	0.12	W
TJ	Junction Temperature	125	$^{\circ}$ C
T _{stg}	Storage Temperature Range	-55~125	$^{\circ}$ C



	m	m
DIM	MIN	MAX
Α	0.30	0.40
В	1. 15	1. 35
С	2.00	2. 40
D	0.	65
Н	1.80	2.20
K	0.80	1.00
М	0. 10	0. 25



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2SC4571

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
Ісво	Collector Cutoff Current	V _{CB} = 15V; I _E = 0			0.1	μА
I _{EBO}	Emitter Cutoff Current	V _{EB} = 1V; I _C = 0			0.1	μА
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5mA ; I _B = 0.5mA			0.5	V
h _{FE}	DC Current Gain	I _C = 5mA ; V _{CE} = 5V	40		200	
f _T	Current-Gain—Bandwidth Product	I _C = 5mA ; V _{CE} = 5V		5.0		GHz
Сов	Output Capacitance	I _E = 0 ; V _{CB} = 3V;f= 1.0MHz		0.9	1.2	pF
S _{21e} ²	Insertion Power Gain	I _C = 5mA ; V _{CE} = 5V;f= 1.0GHz	5.0			dB

♦ h_{FE} Classification

Rank	T75	T76	T77
Marking	T75	T76	T77
h _{FE}	40-80	60-120	100-200

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