

DESCRIPTION

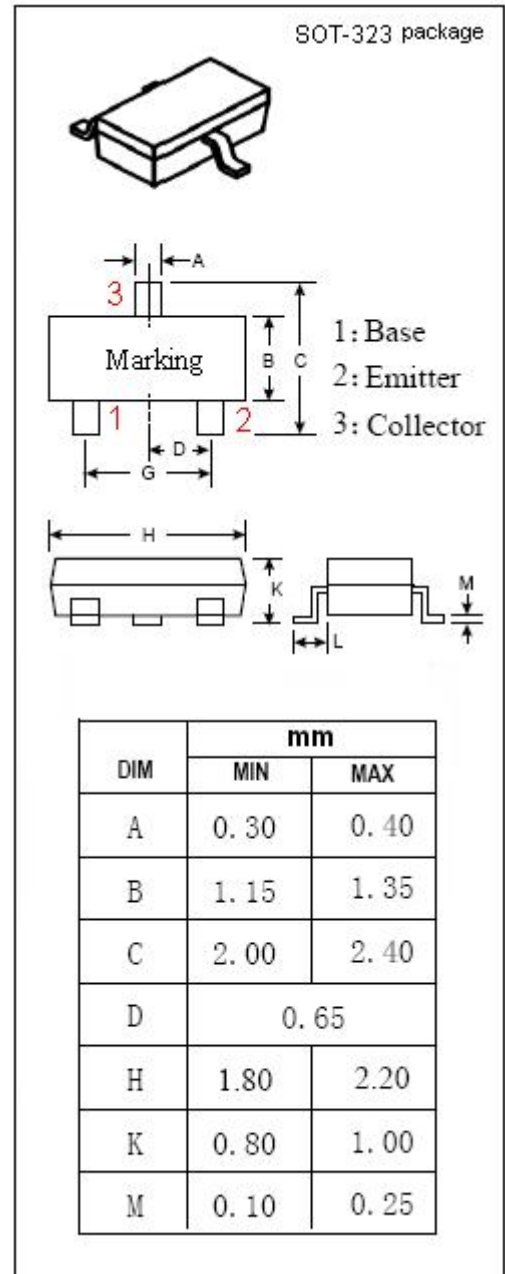
- Low Noise
NF = 1.6 dB TYP., @ $V_{CE} = 5\text{ V}$, $I_C = 5\text{ mA}$, $f = 900\text{ MHz}$
- High Power Gain
PG = 10 dB TYP. @ $V_{CE} = 5\text{ V}$, $I_C = 20\text{ mA}$, $f = 900\text{ MHz}$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for VHF, UHF low noise amplifier.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	15	V
V_{CEO}	Collector-Emitter Voltage	11	V
V_{EBO}	Emitter-Base Voltage	2	V
I_C	Collector Current-Continuous	50	mA
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	0.1	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN RF Transistor

2SC4537

ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 10 μ A ; I _E = 0	15			V
I _{CBO}	Collector Cutoff Current	V _{CB} = 12V; I _E = 0			1.0	μ A
I _{CEO}	Collector Cutoff Current	V _{CE} = 10V; I _E = ∞			1.0	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 1V; I _C = 0			1.0	μ A
h _{FE}	DC Current Gain	I _C = 20mA ; V _{CE} = 5V	50		250	
f _T	Current-Gain—Bandwidth Product	I _C = 20mA ; V _{CE} = 5V	4.5	6.0		GHz
C _{OB}	Output Capacitance	I _E = 0 ; V _{CB} = 5V;f= 1.0MHz		1.0	1.5	pF
PG	Power Gain	I _C = 20mA ; V _{CE} = 5V; f= 900MHz		10		dB
NF	Noise Figure	I _C = 5mA ; V _{CE} = 5V;f= 900MHz		1.6		dB

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