

**DESCRIPTION**

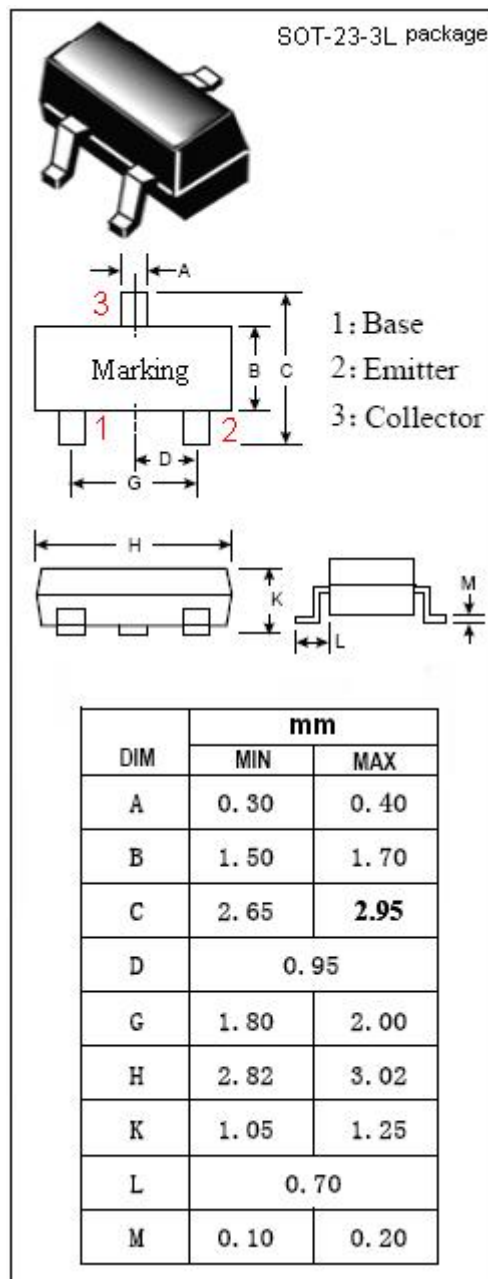
- Silicon NPN epitaxial type
- Local oscillator wide band amplifier
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for use in UHF frequency converters

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	30	V
$V_{CEO}$	Collector-Emitter Voltage	11	V
$V_{EBO}$	Emitter-Base Voltage	3	V
$I_c$	Collector Current-Continuous	50	mA
$P_c$	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	0.15	W
$T_J$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



**ELECTRICAL CHARACTERISTICS**T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 10mA ; I <sub>B</sub> = 5mA			0.7	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 10V; I <sub>E</sub> = 0			0.5	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 5mA ; V <sub>CE</sub> = 10V	20		200	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = 10mA ; V <sub>CE</sub> = 10V	1.4	3.5		GHz
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = 10V;f= 1.0MHz			1.5	pF
CG	Conversion Gain	V <sub>CC</sub> =6V,I <sub>C</sub> =2mA;f=900MHz; f <sub>osc</sub> =930MHz;f <sub>out</sub> =30MHz		15		dB
NF	Noise Figure	V <sub>CC</sub> =6V,I <sub>C</sub> =2mA;f=900MHz; f <sub>osc</sub> =930MHz;f <sub>out</sub> =30MHz		9		dB

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