

TENTATIVE

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL PLANAR TYPE

## HN2C12FT

VHF~UHF BAND LOW NOISE AMPLIFIER APPLICATIONS

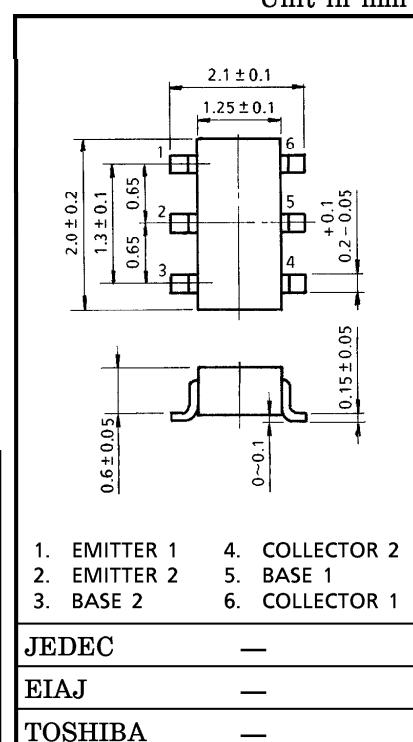
- TWO devices are built in to the super-thin and ultra super mini (.6pins) package : TU6

## MOUNTED DEVICES

	Q1 / Q2
Three-pins (SSM) mold products are corresponded	2SC5096

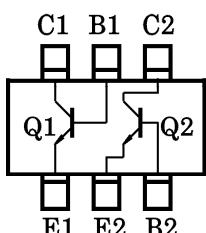
## MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	VCBO	20	V
Collector-Emitter Voltage	VCEO	8	V
Emitter-Base Voltage	VEBO	1.5	V
Collector Current	IC	15	mA
Base Current	IB	7	mA
Collector Power Dissipation	PC	200	mW
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature Range	T <sub>stg</sub>	-55~125	°C

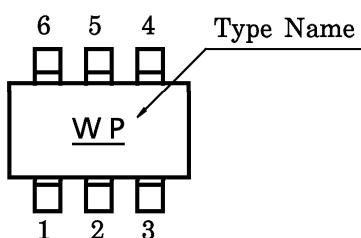


Weight : 0.008g

## PIN ASSIGNMENT (TOP VIEW)



## MARKING



961001EAA1

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## ELECTRICAL CHARACTERISTICS (Q1, Q2) (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I <sub>CBO</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0	—	—	1	μA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> =1V, I <sub>C</sub> =0	—	—	1	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> =7mA	50	—	160	—
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> =7mA	7	10	—	GHz
Insertion Gain	S <sub>21e</sub>   <sup>2</sup> (1)	V <sub>CE</sub> =6V, I <sub>C</sub> =7mA, f=1000MHz	—	13	—	dB
	S <sub>21e</sub>   <sup>2</sup> (2)	V <sub>CE</sub> =6V, I <sub>C</sub> =7mA, f=2000MHz	4	7.5	—	
Noise Figure	NF (1)	V <sub>CE</sub> =6V, I <sub>C</sub> =3mA, f=1000MHz	—	1.4	—	dB
	NF (2)	V <sub>CE</sub> =6V, I <sub>C</sub> =3mA, f=2000MHz	—	1.8	3	
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz (Note)	—	0.4	0.9	pF
Reverse Transfer Capacitance	C <sub>re</sub>		—	0.35	0.85	

(Note) C<sub>re</sub> is measured by 3 terminal method capacitance bridge.