TOSHIBA TA4014FT

## TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

# **TA4014FT**

### TA4014FT USE FOR CRYSTAL OSCILLATORS

- Bias resistors, a transistor for oscillation and a transistor for buffer are packed in one package; hence, TA4014FT can easily compose a crystal oscillator.
- TA4014FT comes with a 6-pin thin ultra-compact package and is suitable for super-high density mounting.

## MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Supply Voltage	$v_{\rm CC}$	6	V
Circuit Current	$I_{CC}$	8	mA
Total Power Dissipation	$P_{\mathrm{D}}$	200	mW
Junction Temperature	$T_{j}$	125	°C
Storage Temperature	$T_{ m stg}$	-55~125	°C

# 2.1±0.1 1.25±0.1 1.25±0.1 1.0+21 1.0+21 2.0+02 1. Fout 4. OSC B 2. GND 5. OSC E 3. VCC 6. Buffer B JEDEC — EIAJ — TOSHIBA —

Unit in mm

## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Circuit Current	$I_{CC}$	$V_{CC} = 3.0 V$	1.08	1.27	1.52	mA
Oscillator Base Voltage	Voscb	$V_{CC} = 3.0 V$	1.34	1.51	1.67	V
Oscillator Emitter Voltage	Vosce	$V_{CC} = 3.0 V$	0.69	0.79	0.88	V
Buffer Base Voltage	$V_{ m BuffB}$	$V_{CC} = 3.0 V$	2.05	2.29	2.53	V
Fout Voltage	$v_{Fout}$	$V_{CC} = 3.0 V$	2.03	2.26	2.52	V

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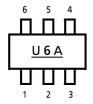
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CHARACTERISTIC	SYMBOL	TYP.	UNIT
R1 Resistance	R <sub>1</sub>	5.6	$\mathbf{k}\Omega$
R2 Resistance	R <sub>2</sub>	6.9	$\mathbf{k}\Omega$
R3 Resistance	R <sub>3</sub>	15	$\mathbf{k}\Omega$
R4 Resistance	R <sub>4</sub>	640	Ω
R5 Resistance	R <sub>5</sub>	670	Ω

## **MARKING**



## **CAUTION**

Because of this product structure, when handling this product, please be sure to protect work desk, human body and soldering irons from electrostatics.

## **EQUIVALENT CIRCUIT DIAGRAM**

