TOSHIBA TA4014FE

TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

# **TA4014FE**

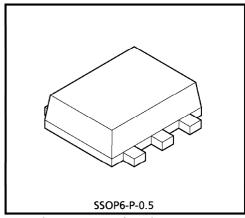
## TA4014FE USE FOR CRYSTAL OSCILLATORS

#### **FEATURES**

- Bias resistors, a transistor for oscillation and a transistor for buffer are packed in one package; hence, TA4014FE can easily compose a crystal oscillator.
- TA4014FE comes with a 6-pin thin ultra-compact package (1.6 mm × 1.6 mm) and is suitable for super-high density mounting.

#### MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Supply Voltage	VCC	6	V
Circuit Current	lcc	8	mA
Total Power Dissipation	P <sub>D</sub> (*)	100	mW*
Junction Temperature	Tj	125	°C
Storage Temperature	T <sub>stg</sub>	<b>- 55∼125</b>	°C



Weight: 0.003 g (Typ.)

(\*): When mounted on the glass epoxy board of  $2.5 \, \text{cm}^2 \times 1.6 \, \text{t}$ .

#### **ELECTRICAL CHARACTERISTICS** (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Circuit Current	lcc	V <sub>CC</sub> = 3.0 V	1.08	1.27	1.52	mA
Oscillator Base Voltage	Voscb	V <sub>CC</sub> = 3.0 V	1.34	1.51	1.67	V
Oscillator Emitter Voltage	Vosce	V <sub>CC</sub> = 3.0 V	0.69	0.79	0.88	٧
Buffer Base Voltage	$V_{BuffB}$	V <sub>CC</sub> = 3.0 V	2.05	2.29	2.53	<b>V</b>
Fout Voltage	V <sub>Fout</sub>	$V_{CC} = 3.0 V$	2.03	2.26	2.52	V

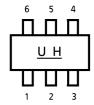
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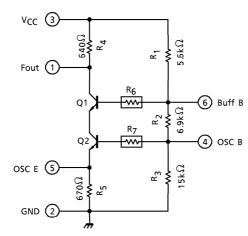
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CHARACTERISTIC	SYMBOL	TYP.	UNIT
R1 Resistance	R <sub>1</sub>	5.6	kΩ
R2 Resistance	R <sub>2</sub>	6.9	kΩ
R3 Resistance	R <sub>3</sub>	15	kΩ
R4 Resistance	R <sub>4</sub>	640	Ω
R5 Resistance	R <sub>5</sub>	670	Ω

#### **MARKING**



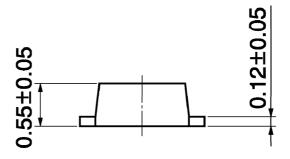
## **EQUIVALENT CIRCUIT DIAGRAM**



Unit: mm

### PACKAGE DIMENSIONS SSOP6-P-0.5

1.6±0.05 1.2±0.05 1.2±0.05 4



Weight: 0.003 g (Typ.)