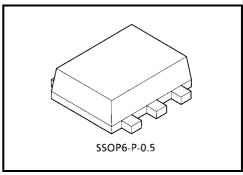
TOSHIBA Bipolar Linear Integrated Circuit Silicon Monolithic

# **TA4015FE**

### TA4015FE Use for Crystal Oscillators

#### **Features**

- Bias resistors, a transistor for oscillation and a transistor for buffer are packed in one package; hence, TA4015FT can easily compose a crystal oscillator.
- TA4015FE comes with a 6-pin thin ultra-compact package and is suitable for super-high density mounting.



Weight: 0.003 g (typ.)

#### **Maximum Ratings (Ta = 25°C)**

Characteristics	Symbol	Rating	Unit
Power supply voltage	V <sub>CC</sub>	6	V
Circuit current	Icc	9	mA
Total power dissipation	PD	100	mW
Junction temperature	Tj	125	°C
Storage temperature	T <sub>stg</sub>	−55 <b>~</b> 125	°C

#### **Electrical Characteristics (Ta = 25°C)**

Characteristics	Symbol	Test Circuit	Test Condition	Min	Тур.	Max	Unit
Circuit current	I <sub>CC</sub>		V <sub>CC</sub> = 3.0 V	1.10	1.32	1.52	mA
Oscillator base voltage	Voscb		V <sub>CC</sub> = 3.0 V	1.65	1.71	1.79	V
Oscillator emitter voltage	Vosce		V <sub>CC</sub> = 3.0 V	0.92	0.99	1.06	V
Buffer base voltage	$V_{BuffB}$		V <sub>CC</sub> = 3.0 V	2.20	2.28	2.36	V
Fout voltage	V <sub>Fout</sub>	_	V <sub>CC</sub> = 3.0 V	1.95	2.02	2.10	V

Characteristics	Symbol	Тур.	Unit
R1 resistance	R <sub>1</sub>	7.5	kΩ
R2 resistance	R <sub>2</sub>	6.8	kΩ
R3 resistance	R <sub>3</sub>	24	kΩ
R4 resistance	R <sub>4</sub>	820	Ω
R5 resistance	R <sub>5</sub>	820	Ω

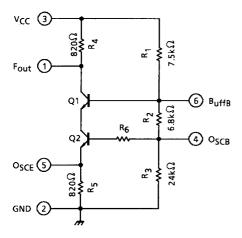
#### Marking



#### Caution

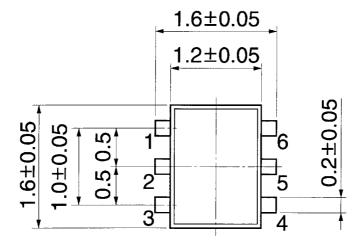
Because of this product structure, when handling this product, please be sure to protect work desk, human body and soldering irons from electrostatics.

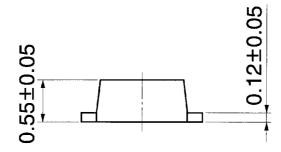
# **Equivalent Circuit Diagram**



# **Package Dimensions**

SSOP6-P-0.5 Unit: mm





Weight: 0.003 g (typ.)

3 2003-03-24

#### RESTRICTIONS ON PRODUCT USE

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