TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

TA4014FE

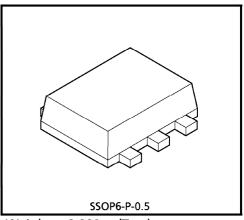
TA4014FE USE FOR CRYSTAL OSCILLATORS

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 _D (*)	100	mW*
Junction Temperature	Tj	125	°C
Storage Temperature	T _{stg}	- 55∼125	°C



Weight: 0.003 g (Typ.)

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

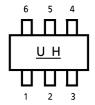
ELECTRICAL CHARACTERISTICS ($Ta = 25^{\circ}C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Circuit Current	lcc	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	٧
Oscillator Emitter Voltage	VOSCE	V _{CC} = 3.0 V	0.69	0.79	0.88	٧
Buffer Base Voltage	V _{BuffB}	V _{CC} = 3.0 V	2.05	2.29	2.53	٧
Fout Voltage	V _{Fout}	V _{CC} = 3.0 V	2.03	2.26	2.52	V

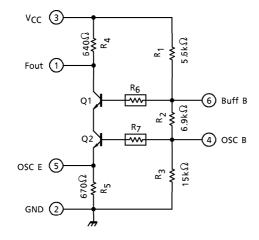
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CHARACTERISTIC	SYMBOL	TYP.	UNIT
R1 Resistance	R ₁	5.6	kΩ
R2 Resistance	R ₂	6.9	kΩ
R3 Resistance	R ₃	15	kΩ
R4 Resistance	R ₄	640	Ω
R5 Resistance	R ₅	670	Ω

MARKING



EQUIVALENT CIRCUIT DIAGRAM



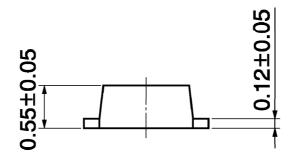
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PACKAGE DIMENSIONS SSOP6-P-0.5

1.6±0.05 1.2±0.05 1.2±0.05 50.0+0.0 20.0+0.0 50.0+0.0

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Unit: mm



Weight: 0.003 g (Typ.)

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