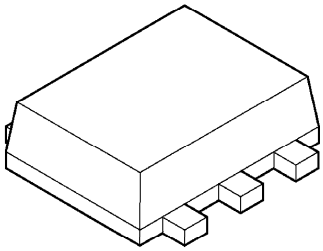
TOSHIBA BIPOLAR LINEAR INTEGRATED CIRCUIT SILICON MONOLITHIC

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.



SSOP6-P-0.5

Weight : 0.003 g (Typ.)

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Power Supply Voltage	V_{CC}	6	V
Circuit Current	I_{CC}	8	mA
Total Power Dissipation	P_D (*)	100	mW*
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	−55~125	°C

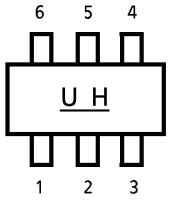
(*) : When mounted on the glass epoxy board of 2.5 cm^2 × 1.6 t.

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

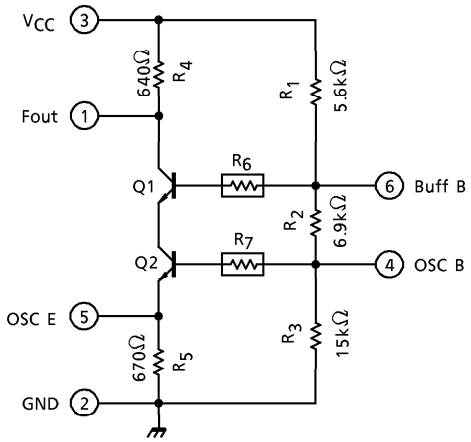
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Circuit Current	I_{CC}	V_{CC} = 3.0 V	1.08	1.27	1.52	mA
Oscillator Base Voltage	V_{OSCB}	V_{CC} = 3.0 V	1.34	1.51	1.67	V
Oscillator Emitter Voltage	V_{OSCE}	V_{CC} = 3.0 V	0.69	0.79	0.88	V
Buffer Base Voltage	V_{BuffB}	V_{CC} = 3.0 V	2.05	2.29	2.53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

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



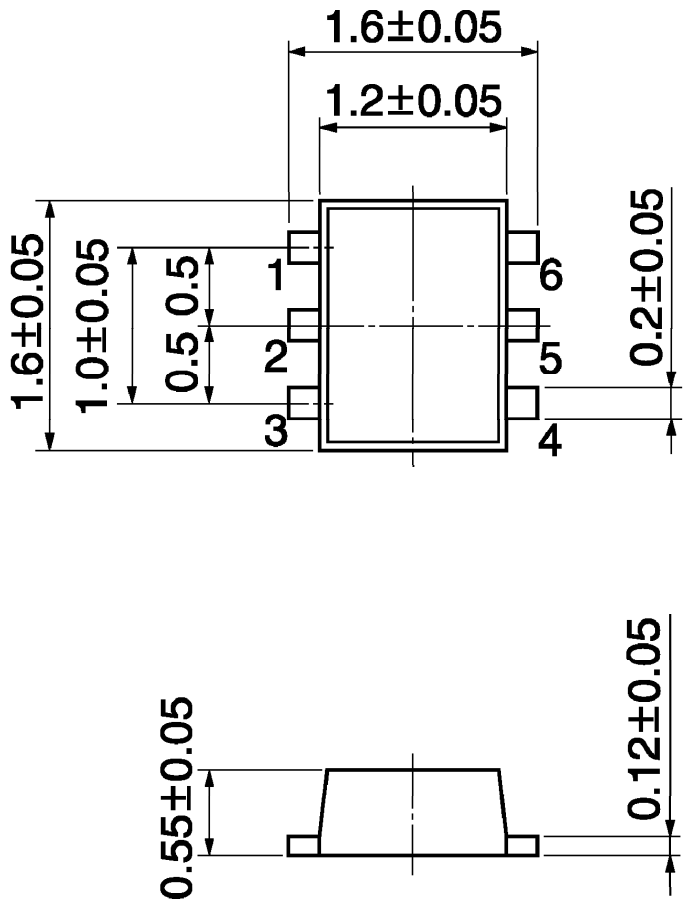
EQUIVALENT CIRCUIT DIAGRAM



PACKAGE DIMENSIONS

SSOP6-P-0.5

Unit : mm



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