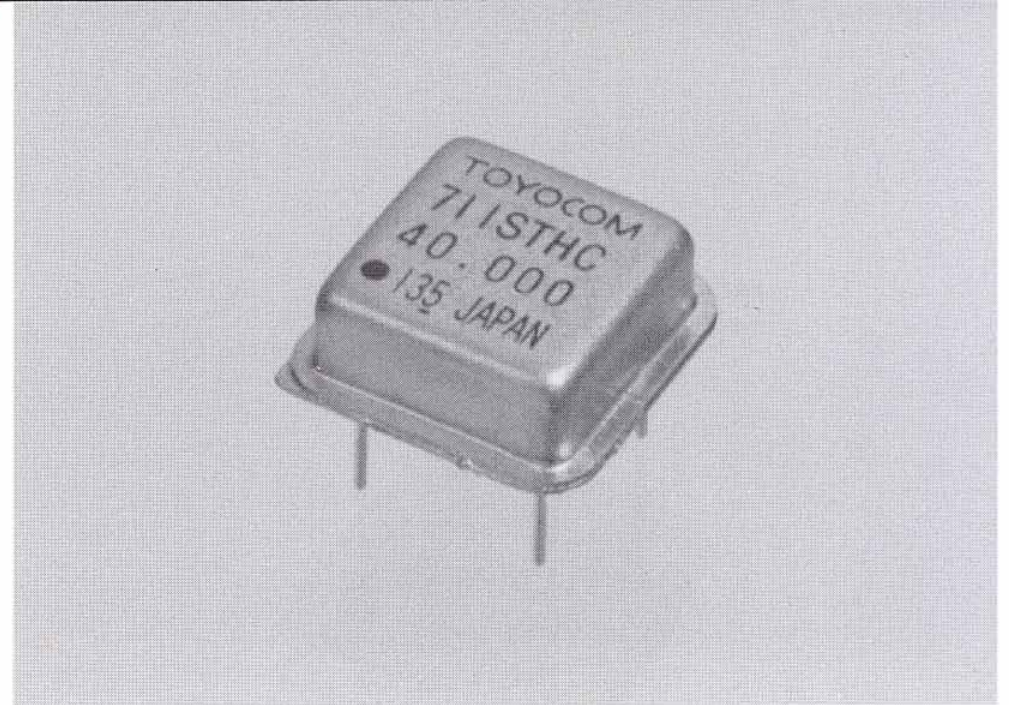


# TCO-711STHC TCO-745STHC TCO-744STHC

HALF DIP CMOS



## Features

- CMOS logic output
- DIL-8 pin package compatible
- Hermetically sealed metal package
- Enable/Disable feature
- Case ground 4-pin for minimizing RF radiation

## Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Supply voltage	V <sub>CC</sub>	-0.5 to +7.0	V
Input voltage	V <sub>IN</sub>	-0.5 to V <sub>CC</sub> +0.5	V
Output voltage	V <sub>O</sub>	-0.5 to V <sub>CC</sub> +0.5	V
Input current	I <sub>IN</sub>	±10	mA
Output current	I <sub>O</sub>	±25	mA
Storage temperature	T <sub>stg</sub>	-55 to +125	°C

## Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Frequency range	F <sub>O</sub>	1.25	—	70	MHz	
Frequency stability	$\Delta F/F_O$	-100	—	100	ppm	TCO-711STHC *1
		-50	—	50	ppm	TCO-745STHC
		-25	—	25	ppm	TCO-744STHC
Operating temperature	T <sub>opr</sub>	0	25	70	°C	
Operating voltage	V <sub>CC</sub>	4.5	5.0	5.5	V	DC
Operating current	I <sub>CC</sub>	—	—	See Table A	mA	V <sub>CC</sub> = 5.5V
Input voltage	V <sub>IH</sub>	3.5	—	—	V	#1: V <sub>IH</sub> or OPEN → Enable
	V <sub>IL</sub>	—	—	1.5	V	#1: V <sub>IL</sub> or GND → Disable
Output voltage	V <sub>OH</sub>	V <sub>CC</sub> -0.4	—	—	V	I <sub>OH</sub> = -4mA
	V <sub>OL</sub>	—	—	0.4	V	I <sub>OL</sub> = 4mA
Symmetry	SYM	45	50	55	%	at 50%V <sub>CC</sub>
Rise/Fall time	tr,tf	—	—	See Table A	ns	at 10%V <sub>CC</sub> to 90%V <sub>CC</sub> / at 90%V <sub>CC</sub> to 10%V <sub>CC</sub>
Load capacitance	C <sub>L</sub>	—	15	50	pF	1.25 to 26MHz
		—	15	30	pF	26+ to 50MHz
		—	—	15	pF	50+ to 70MHz
Start-up time	t <sub>st</sub>	—	—	4	ms	1.25 to 26MHz *2
		—	—	10	ms	26+ to 70MHz *2

\*1 Inclusive of calibration tolerance at 25°C, operating temperature, operating voltage range.

\*2 Rise time (0 to 4.5V) of V<sub>CC</sub> > 150μs

Table A

Freq.	1.25+ to 10	10+ to 26	26+ to 50	50+ to 70	MHz
I <sub>CC</sub>	10	15	35	50	mA
tr,tf	12	12	10	6	ns

## Test Circuit

See page 5 TEST-4.

## Package outline

