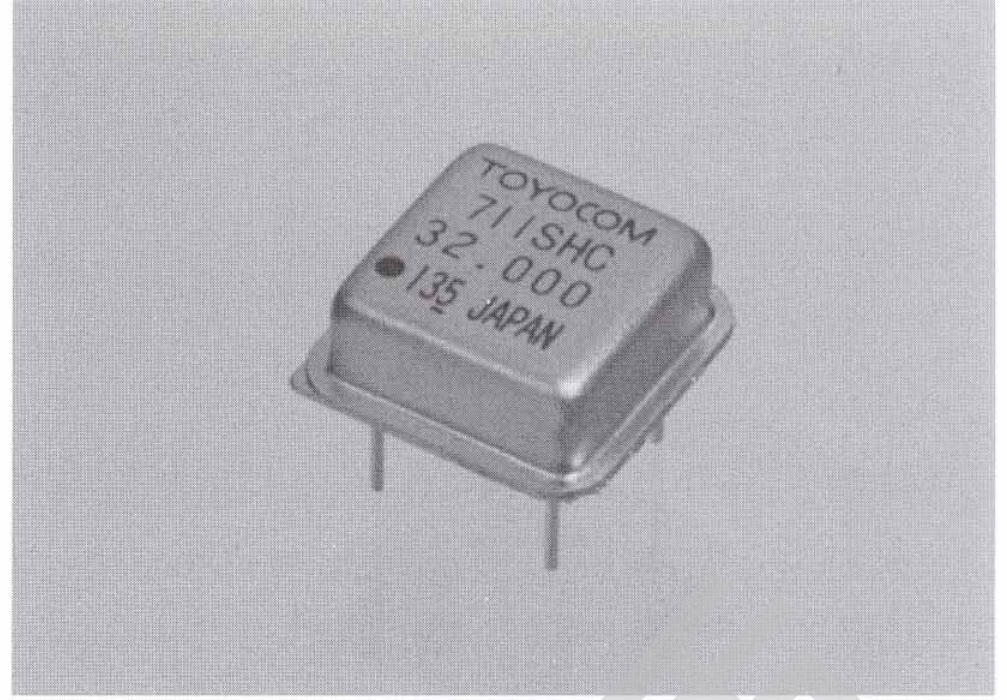


TCO-711SHC TCO-745SHC TCO-744SHC

HALF DIP CMOS



Features

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

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Supply voltage	V _{CC}	-0.5 to +7.0	V
Input voltage	V _{IN}	-0.5 to V _{CC} + 0.5	V
Output voltage	V _O	-0.5 to V _{CC} + 0.5	V
Input current	I _{IN}	±10	mA
Output current	I _O	±25	mA
Storage temperature	T _{stg}	-55 to +125	°C

Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Frequency range	F _O	1.25	—	70	MHz	
Frequency stability	ΔF/F _O	-100	—	100	ppm	TCO-711SHC *1
		-50	—	50	ppm	TCO-745SHC
		-25	—	25	ppm	TCO-744SHC
Operating temperature	T _{opr}	0	25	70	°C	
Operating voltage	V _{CC}	4.5	5.0	5.5	V	DC
Operating current	I _{CC}	—	—	See Table A	mA	V _{CC} = 5.5V
Output voltage	V _{OH}	V _{CC} -0.4	—	—	V	I _{OH} = -4mA
	V _{OL}	—	—	0.4	V	I _{OL} = 4mA
Symmetry	SYM	45	50	55	%	at 50%V _{CC}
Rise/Fall time	tr,tf	—	—	See Table A	ns	at 10%V _{CC} to 90%V _{CC} / at 90%V _{CC} to 10%V _{CC}
Load capacitance	C _L	—	15	50	pF	1.25 to 26MHz
		—	—	30	pF	26+ to 50MHz
		—	—	15	pF	50+ to 70MHz
Start-up time	t _{st}	—	—	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_{CC} > 150μs

Table A

Freq.	1.25+ to 10	10+ to 26	26+ to 50	50+ to 70	MHz
I _{CC}	10	15	35	50	mA
tr,tf	12	12	10	6	ns

Test Circuit

See page 5 TEST-3.

Package outline

