

OCXO

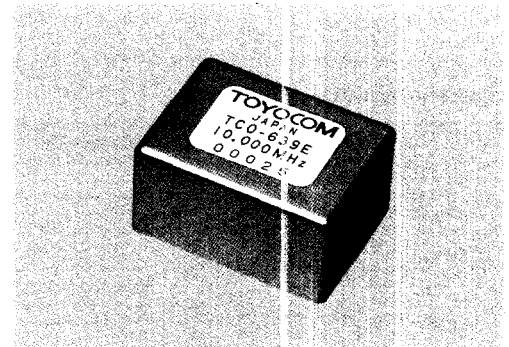
TCO-639E

Features

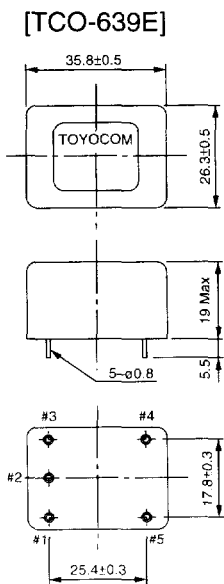
- Excellent long and short-term stability
- Low SSB phase noise
- Fast warm-up
- Low profile
- Miniature size

Specifications

Type	TCO-639E
Standard frequency	5MHz, 6.4MHz, 10MHz, 13MHz
Stability vs Temperature	$\pm 1 \times 10^{-7} / -20$ to $+70^\circ\text{C}$ (referred to $+25^\circ\text{C}$)
Stability vs Supply voltage	$\pm 3 \times 10^{-8} / +12\text{V} \pm 10\%$
Aging	$\pm 2 \times 10^{-9} / \text{day}$ (after 24 hours operation), $\pm 2 \times 10^{-7} / \text{year}$
Warm-up	$\pm 5 \times 10^{-8} / \text{within 5 minutes at } +25^\circ\text{C}$
Output	TTL compatible (Fanout-2)
Supply voltage	$+12\text{V} \pm 10\%$
Current drain	Warm-up : 150mA Max Steady state at $+25^\circ\text{C}$: 70mA Max
Frequency adjustment	± 1 ppm Min by external potentiometer (10k Ω)
Weight	30 g
Available frequency range	3 to 20MHz



Outline Drawing [mm]

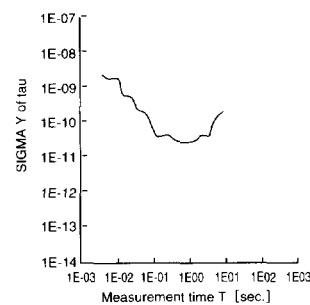


Pin connections

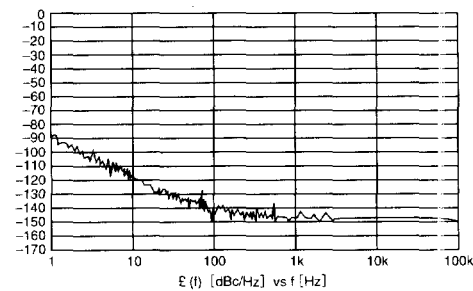
1-2-5	Frequency adjustment
3	Vcc
4	Output
5	GND/case

Electrical Data

TCO-639 10MHz Short-term stability

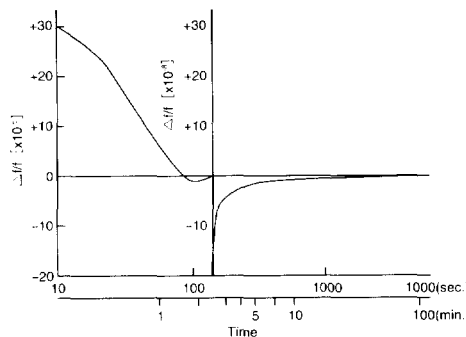


TCO-639 10MHz SSB phase noise data

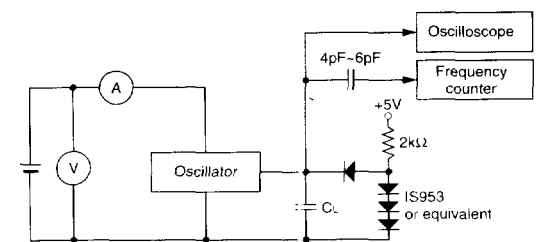


TCO-639 10MHz Warm-up characteristics at $+25^\circ\text{C}$

Note: These characteristics are measured with respect to frequency after 20 minutes of Power-on.



Test Circuit



C1: Total fixture and probe capacitance = 15pF max.