

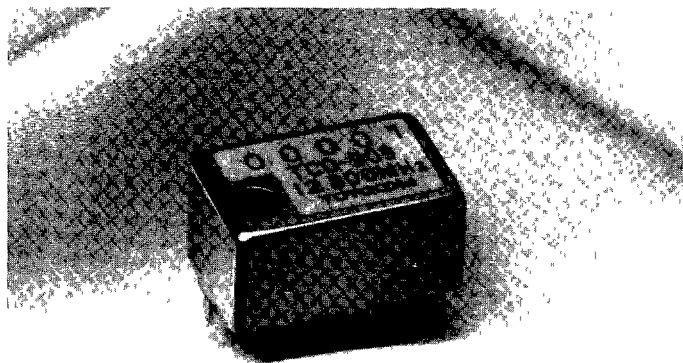
Crystal Oscillators

Applications

- Portable radio
- Cellular mobile radio

Features

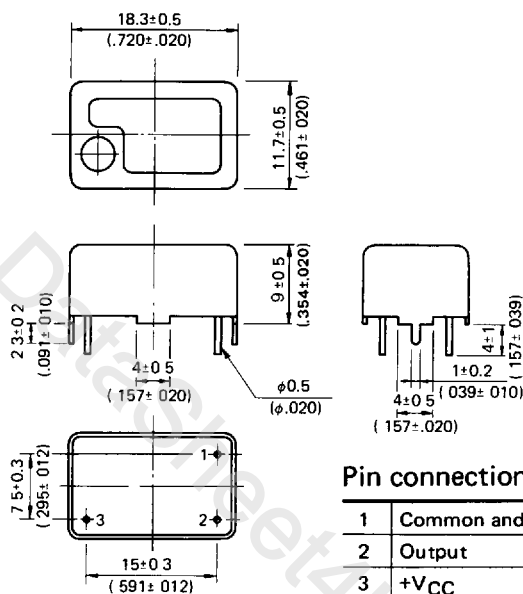
- Miniature size (2 cc)
- Low power consumption (2mA max.)
- High frequency stability



Model	TCO-909Z
Standard frequencies	12.8 MHz or 15.36 MHz
Frequency available range	10 to 20 MHz
Frequency stability	
vs. Temperature	± 2.5 ppm/ -30 to $+75^{\circ}\text{C}$
vs. Supply voltage	± 0.3 ppm/ $+5\text{V} \pm 5\%$
Aging	± 1 ppm/year
Supply voltage	$+5\text{V} \pm 5\%$
Supply current	2mA max.
Output	1 Vp-p min. clipped sinewave (DC-cut)
Operable temperature range	-40 to $+85^{\circ}\text{C}$
Frequency adjustment	± 3 ppm min. by internal trimmer

Outline drawing

TCO-909Z

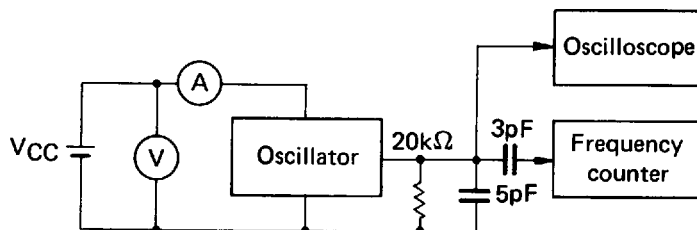


Pin connections

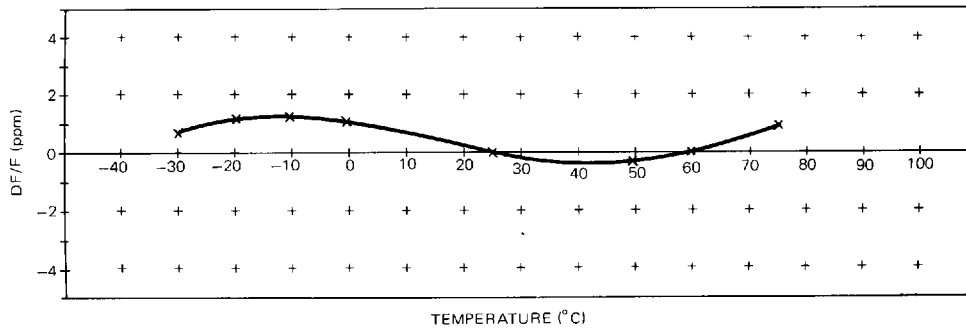
1	Common and case
2	Output
3	+V _{CC}

Size in mm
(inch)

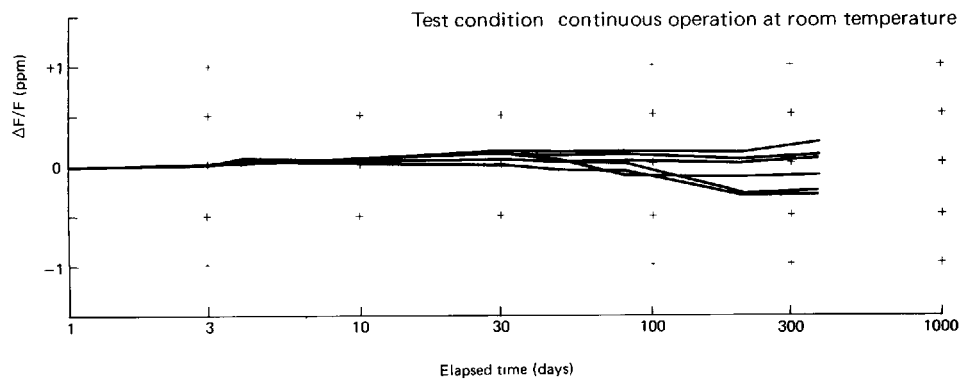
Test circuit



Frequency stability vs. Temperature



Aging characteristics



TCO-909 12.8 MHz SSB PHASE NOISE

