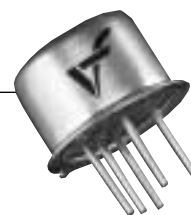
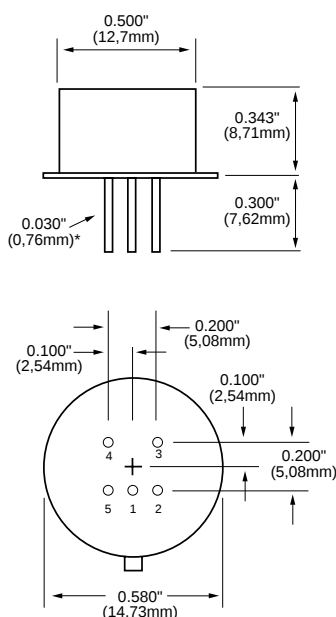


VF37RT

Precision Resonator–Thermostat
in TO 8 Package

FEATURES

- Incorporated Thermo Controller
- Precision Resonator
- 3rd O/T SC Cut
- Low Power Consumption
- Low Aging



* Long .018 diameter leads available.

All dimensions are typical unless otherwise specified.

	Parameter	Symb	Condition	Min	Typ	Max	Unit	Note
Absolute Max. Ratings	Input Break Down Voltage	V _{cc}		-0.5		13.5	V	
	Storage Temperature	T _s		-40		+85	°C	
Electrical	Frequency	F			10.000		MHz	1
	Input Voltage	V _{cc}		4.75	5.00	5.25	V	2
	Input Current Steady State	I _{cc}	@ 25°C		15 25	20 35	mA	V _{cc} =12V V _{cc} =5V
	Input Current Start-up	I _{cc}			200 90		mA	V _{cc} =12V V _{cc} =5V
	Warm-up Time	t	to 0.1 ppm accuracy		15s 35s		s	V _{cc} =12V V _{cc} =5V
Crystal Resonator Parameters	Cut, Mode	SC, 3rd overtone						
	Calibration		@ series			±2	ppm	Customer Specified
	Frequency Stability	ΔF/F	vs. Temperature		±50 ±30	±80 ±50	ppb	@5V @12V
	Aging	ΔF/F	per day per year			±0.001 ±0.1	ppm	after 30 days, drive level <50 μW
	Motional Resistance	ESR			120	200	Ohm	
	Motional Inductance	L1			1.0		H	
	Retrace		After 30 minutes			±20	ppb	
	G-sensitivity		Worst direction			1	ppb/G	
	Operating Temperature Range	-30°C to +70°C						
	Mechanical Shock	Per MIL-STD-202, 30G, 11ms						
Environmental and Mechanical	Vibration	Per MIL-STD-202, 5G, 10 to 2000Hz						
	Soldering Conditions	260°C, for 10s, Max., leads only						
	Hermetic Seal	Leak rate less than 1 x 10 ⁻⁸ atm.cc/s of helium						
Electrical Connections	Pin Out	Pin #1–Case	Pin #2–V _{cc}	Pin #3–Crystal				
		Pin #4–Ground	Pin #5–Crystal					

Notes:

1. Available in frequency range 8 to 20 MHz, above parameters specified for 10 MHz.
2. Customer may specify V_{cc} from 5V to 12V, ±5%, ±10%.

All specifications are subject to change without notice.