

Product Data Sheet

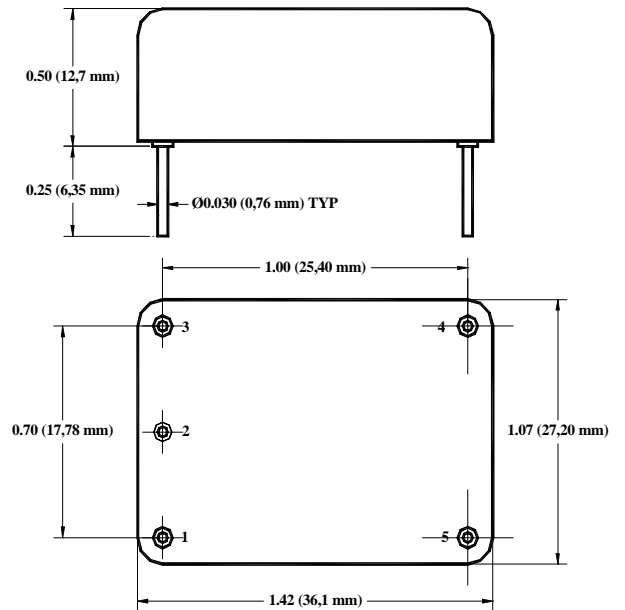
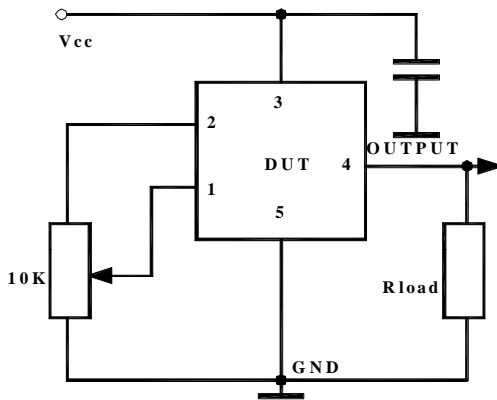
Features

- SC-cut crystal
- High Stability (up to $\pm 5 \times 10^{-9}$ over 0°C to 50°C)
- Low Aging (5×10^{-10} /day, 5×10^{-8} /year)
- Low Phase Noise (-160 dBc/Hz, TYP, floor)
- Sine Wave or HCMOS/TTL output
- 4.8 MHz to 50 MHz Frequencies Available



Applications

- Telecommunication Systems
- Data Communications
- GPS
- Instrumentation



VFTCE Series OCXO

Specifications:

Parameter	Symb	Condition	Min	Typ	Max	Unit	Note
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Absolute Maximum Ratings

Input Break Down Voltage	Vcc		-0.5		13.0	V	
Storage temper.	Ts		-40		85	°C	
Control Voltage	Vc		-1		9	V	

Electrical

Frequency	F		4.8	10.000	50	MHz	
Frequency stability	$\Delta F/F$	vs. Temp.		± 20	± 50	ppb	See chart below
		vs. Supply		1	5	ppb/V	
Aging		per day		5E-10			after 30 days
		per year		1E-7			5E-8 available
Allan Variance		.1s to 10s		1E-11			
SSB Phase Noise		10 Hz		-120		dBc/Hz	
		100 Hz		-150			
		10 KHz		-160			
Retrace		After 30 minutes			± 20	ppb	
G-sensitivity		worst direction			± 1.0	ppb/G	
Input Voltage	Vcc		4.75	5.0	5.25	V	12V \pm 5% optional
Power consumption	P	steady state, 25°C		0.8	1	W	
		steady state, -30°C		1.5			
		start-up @ -30°C		2.5			
Load	10KOhm//15pF (HCMOS/TTL), 50 Ohm (Sinewave)						
Warm-up time	τ	to 0.1ppm accuracy			5	minutes	3 min. at 12V
Output Waveform	3.3V HCMOS/TTL compatible or Sinewave (>+7dBm)						-25dBm Harmonics at sine
Control voltage	Vc		0		4.0	V	
Pull range		from nominal F	± 0.5	± 1		ppm	
Deviation slope		Monotonic, posit		0.4		ppm/V	
Setability	Vc0	@25°C, Fnom.	1.0	2.0	3.0	V	

All parameters for 10 MHz

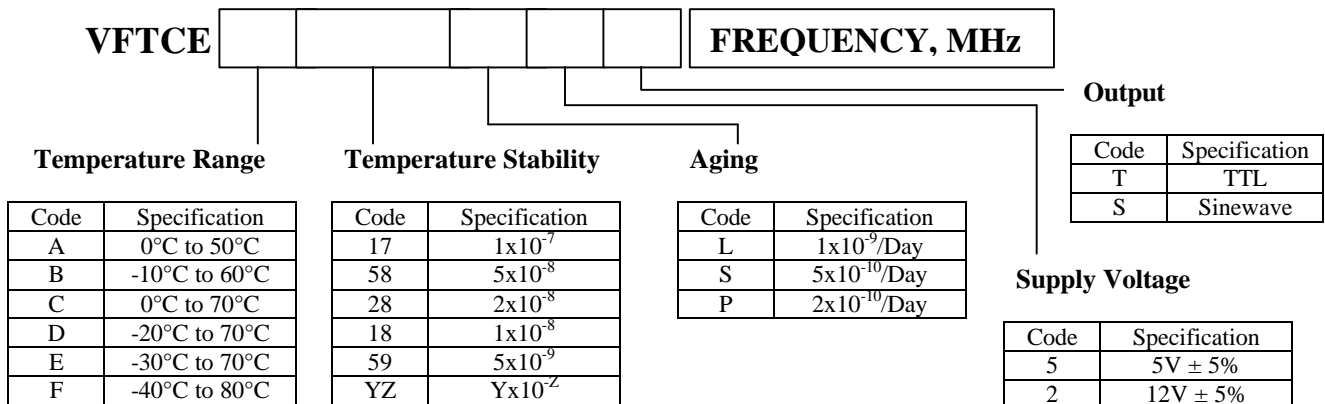
Environmental and Mechanical

Operating temp. range	-30°C to 70°C Standard, Other options – see chart below
Mechanical Shock	Per MIL-STD-202, 30G, 11ms
Vibration	Per MIL-STD-202, 5G to 2000 Hz
Soldering Conditions	230°C for 30s Max SMD profile

Electrical Connections

Pin Out	Pin #1 – Vc; Pin #2 – Vref; Pin #3 – Vcc; Pin #4 – Output; Pin#5 – GND
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Creating a Part Number



Not all combinations are available. Consult Factory.