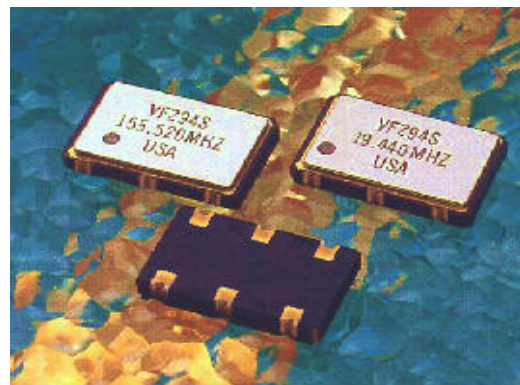


Surface Mount VCXO



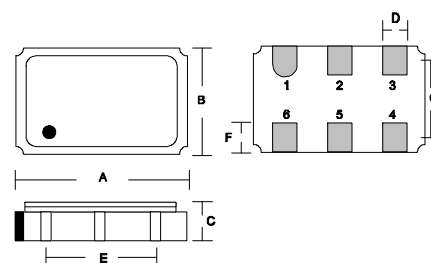
ECM VF194 / 294

- Very Low Phase Jitter
- Industrial Temperature Range
- Miniature Ceramic Package
- SMD Tri-state Oscillator
- 3.3V Supply



Parameter	VF194 – VF294	Notes
Frequency Range	1.54MHz to 160.0MHz	
Stability	+/-25ppm	Vs. Temp
Supply Voltage	5V +/-5% 3.3V +/-5%	Standard Option
Supply Current	30mA	No Load
Load	10TTL gates or 50pF	
Duty Cycle	40 / 60 or 45/55	Specify
Rise & Fall Times	6nS max	
Logic "1" Level	0.9Vcc min	Max Load
Logic "0" Level	0.1Vcc max	Max Load
Start Up Time	10mS max	2mS Typ
Phase Jitter	1pS max 20pS max	<52MHz >52MHz
Modulation BW	10kHz @ -3dB min	
Input Impedance	50K ohm min	Fm<10kHz
Control Voltage	0V to 5.0V 0V to 3.3V	Vcc 5.0V Vcc 3.3V
Pulling Range	+/- 50ppm	Or Specify
Linearity	+/-20%	
Setability (Vc for center frequency)	2.50V typ 1.65V typ	Vcc 5.0V Vcc 3.3V
Tristate Fuction	Input HIGH (>2.5V) or floating: ACTIVE Input LOW (<0.5V): INFINITE IMPEDANCE	
Enable Disable	100ns max	
Operating Temp	0°C to +70°C -45°C to +85°C Available	Standard Option

Environmental & Mechanical	
Mechanical Shock	Mil STD 202 Method 213 Cond E
Thermal Shock	Mil STD 883 Method 1011 Cond A
Vibration	MIL-STD-883 Method 2007 Cond A
Soldering	230°C for 90s max
Hermetic Seal	Leak rate less than 5x10 ⁻⁸ Atm.cc/s of helium



Pin (VF194)	1	2	3
Connection	Vc	N/C	GND
Pin (VF194)	6	5	4
Connection	O/P	Tri	Vcc

Pin (VF294)	1	2	3
Connection	Vc	Tri	GND
Pin (VF294)	6	5	4
Connection	Vcc	N/C	O/P

A	B	C	D	E	F	G
7.7	5.2	2.3	1.14	5.08	1.27	3.93

Dimensions in mm

Part Numbering VF194 /294 S H L 1 50 155.52M
Type

Stability S = 20ppm Blank = Std

Duty Cycle H = 45/55 Blank = 46/60

Supply Voltage L = 3.3V Blank = 5.0

Temperature Range 1 = -40°C to +85°C

Blank = Standard

Pulling Range Blank = Std or specify

Frequency

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Although we have attempted to accurately reflect the products we market. ECM reserve the right without prior notice to discontinue any product or make design changes we believe necessary.

Issue 1