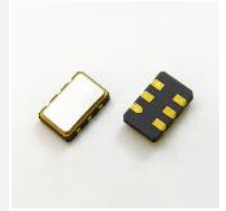


DUAL FREQUENCY OUTPUT CERAMIC SMD VCXO (5.0 x 3.2mm)
FEATURES

- Designed specifically for Digital Video application
- 2 user-selectable output frequencies: 74.1758MHz, 74.250MHz
- High reliability and low aging
- Available CMOS, LVDS, and LVPECL outputs
- 3.3V and 2.5V supply options

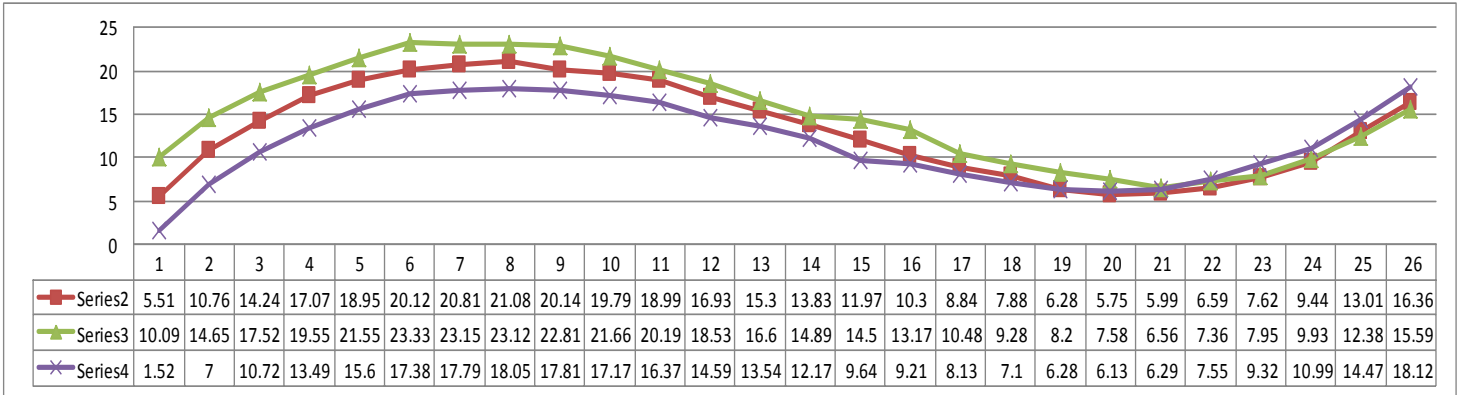

■ SPECIFICATION

PARAMETER		MIN.	TYP.	MAX.	UNIT	NOTE
FREQUENCY		74.1758MHz, 74.250MHz				
FREQUENCY STABILITY		±10*	±50	±100	ppm	See P/N guide for other options
OPERATING TEMPERATURE RANGE		-40		85	°C	See P/N guide for other options
STORAGE TEMPERATURE RANGE		-55		125	°C	
SUPPLY VOLTAGE ±10%		V _{DD} = 2.5V _{DC}	2.375	2.500	2.625	V
		V _{DD} = 3.3V _{DC}	2.970	3.300	3.630	V
SUPPLY CURRENT		CMOS		20	45	mA
		LVDS		23	45	mA
		LVPECL		54	60	mA
LOAD		CMOS		15		pF
		LVDS		100		Ω
		LVPECL		50		Ω
LEVEL		CMOS (V _{OH})	0.9 x V _{DD}			V
		CMOS (V _{OL})			0.1 x V _{DD}	V
		LVDS (V _{OH})		1.4	1.6	V
		LVDS (V _{OL})	0.9	1.1		V
		LVPECL (V _{OH})	V _{DD} - 1.03V		V _{DD} - 0.60V	V
		LVPECL (V _{OL})	V _{DD} - 1.85V		V _{DD} - 1.62V	V
SYMMETRY (DUTY CYCLE)		CMOS	45		55	%
		LVDS	45		55	%
		LVPECL	45		55	%
RISE AND FALL TIME (Tr/Tf)		CMOS		1.0	3.0	nS
		LVDS		0.25	0.6	nS
		LVPECL		0.25	0.6	nS
START-UP TIME				2.0	3.0	mS
STAND-BY VOLTAGE		ENABLE (V _{IH})	0.7 x V _{DD}			V
		DISABLE (V _{IL})			0.3 x V _{DD}	V
ENABLE DELAY TIME				100		nS
DISABLE DELAY TIME				100		nS
FREQUENCY DEVIATION		±50				ppm
CONTROL VOLTAGE		0.00		V _{DD}		V
CONTROL PORT BANDWIDTH		10				MHz
SLOPE		Positive				
LINEARITY				10		%
MODULATION BANDWIDTH		10				kHz
INPUT IMPEDANCE		100				kΩ
AGING		per 1year			±3.0	ppm
		per 10years			±5.0	ppm
PHASE JITTER RMS			0.60	1.50		pS
PERIOD JITTER			2.0	3.0		pS

* Available in selected operating temperature range

Transko Electronics, Inc reserves the right to make changes to the product (s), service (s), and specification (s) described herein without notice. See "Terms of Sale" for details on our website.

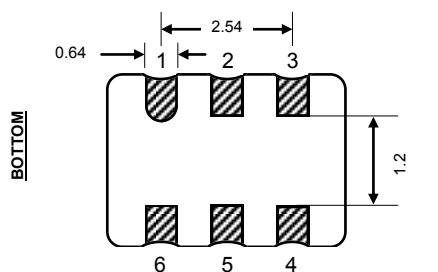
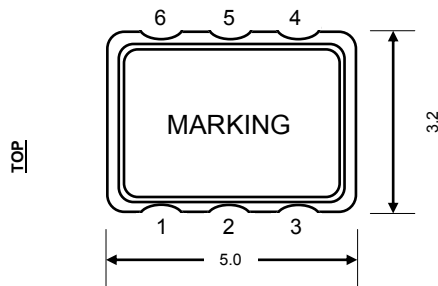
27MHz 3.3V VCXO Temperature Test Data (-40°C ~ 85°C)



Phase Noise & RMS Jitter measurement

NO	10Hz	100Hz	1kHz	10kHz	100kHz	1MHz	5MHz	RMS Jitter
1	-80.6273	-112.688	-129.15	-137.313	-147.43	-155.45	-156.504	361.533 fsec
2	-61.0806	-97.5347	-128.019	-137.417	-147.984	-155.629	-154.72	349.765 fsec
3	-77.2813	-112.702	-127.812	-138.709	-149.653	-155.171	-154.144	346.426 fsec
Average	-72.9964	-107.642	-128.327	-137.813	-148.356	-155.416	-155.122	352.57 fsec

PACKAGE DIMENSIONS



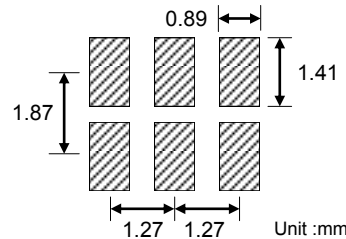
Unit:mm

Pin Configuration	
1	Vcon
2	*Fsel
3	Ground
4	Output
5	**C.output
6	VDD

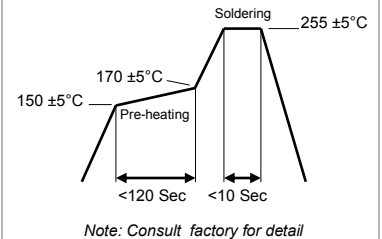
* Fsel	
Fsel	Corresponding Frequency
GND	74.1758MHz
VDD	74.250MHz

** LVDS/LVPECL only

SOLDER PATTERN



REFLOW PROFILE



PART NUMBERING GUIDE

TVC5 - P 50 HM 33 C - TR

Product series

Output

P: PECL

L: LVDS

H: CMOS

Stability

00: ± 100ppm

50: ± 50ppm

25: ± 25ppm

15: ± 15ppm

10: ± 10ppm*

XX: Two digit for Stability

Operating Temperature

A: -55 F: -20 M: 70 S: 100

B: -50 G: -10 N: 75 T: 105

C: -40 H: 0 P: 80 U: 125

D: -35 J: 50 Q: 85 X: custom

E: -30 K: 60 R: 90

Tape and Reel

TR: 1000/reel

Blank: Cut tape

Pullability

A: ±50ppm

B: ±75ppm

C: ±100ppm

Supply Voltage

25: 2.5 Volt

33: 3.3 Volt

* Available in 0°C to 70°C only

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