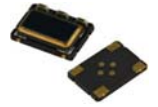


(V)TCSW75LC Series

TCXO/VC-TCXO, 7.0 x 5.0mm, Clipped sine wave



REACH RoHS compliant
From ±0.5ppm stability over 0°C to 50°C

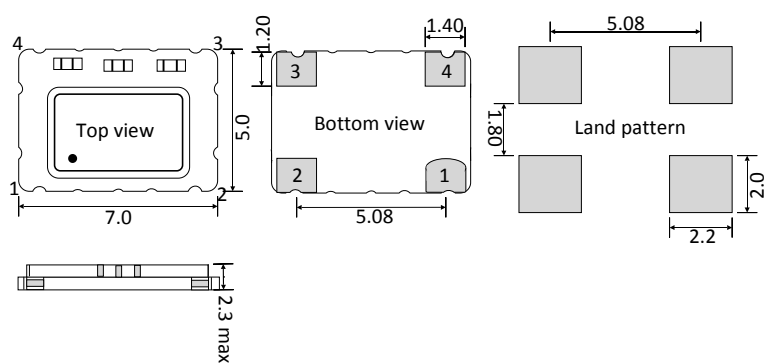


Parameters		Specification		Remarks
Frequency range	F_nom	10.0MHz ~ 40.0MHz		
Supply voltage	Vcc	3.3V, 5.0V		
Initial frequency tolerance	F_tol	<±1.0ppm		At +25°C±2°C
Frequency stability	vs Temperature	F_stb	±0.5ppm ~ ±3.0ppm	Table 1
	vs Load	F_load	±0.2ppm max	±10% load condition change
	vs Voltage	F_Vcc	±0.2ppm max	±5% input voltage change
	vs Aging	F_age	±1.0ppm/year max	At +25°C
	vs Reflow		±1.0ppm/year max	1 reflow and measured after 24hrs
Operating temperature range (°C)	Topr	0°C ~ +50°C to -40°C ~ +85°C		Table 1
Storage temperature (°C)	Tstg	-55°C ~ +125°C		
Output wave form		Clipped sine wave		
Output voltage level		0.8V p-p (min)		
Output load		10KΩ//10pF		
Output format		DC block, AC coupled		
Current consumption	Icc	10.0~15MHz: 1.5mA, 15.01~26.0MHz: 2.0mA 26.01~40.0MHz: 2.5mA		
Start-up time	T_str	2.0m sec (typ.), 5.0m sec. (max)		Reach 90% amplitude at +25°C±2°C
VC-TCXO option only				
Control Voltage	Vc	1.5V ± 1.0V		For both Vcc = 3.3V and 5.0V
Frequency tuning (ppm)		±5.0ppm		
Linearity/Slope polarity		±10.0% max/Positive slope		Positive voltage for positive frequency shift
Input impedance		1.0MΩ min		
Modulation bandwidth		3.0kHz min		

Table 1. Frequency stability vs Temperature

Temp. (°C)	Stability in ppm					
	±0.5	±1.0	±1.5	±2.0	±2.5	±3.0
0°C to 50°C	✓	✓	✓	✓	✓	✓
-10°C to 60°C	Enq.	✓	✓	✓	✓	✓
-20°C to 70°C	X	✓	✓	✓	✓	✓
-30°C to 75°C	X	✓	✓	✓	✓	✓
-30°C to 85°C	X	✓	✓	✓	✓	✓
-40°C to 85°C	X	Enq.	✓	✓	✓	✓

Dimensions (mm)



- Pad 1 : Control voltage (VCTCXO). No connection(TCXO)
- Pad 2 : Ground
- Pad 3 : Output
- Pad 4 : Supply Voltage

Phase noise (13.0MHz example)	dBc/Hz typical
10Hz	-80
100Hz	-115
1kHz	-135
10kHz	-148
100kHz	-148

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TCXO/VC-TCXO, 7.0 x 5.0mm, Clipped sine wave



TCXO part number generation											
TC75L	2600	M	B	X	N	B	N	X	Z	L	-PF
ACT Series Code	Frequency (MHz) Ex. 26.00MHz	Temp. stability (±ppm)	Supply voltage (V)	Operating temp. range (°C)	Frequency tuning (±ppm)	Output wave	Mechanical tuning (±ppm)	Polarity	Duty Cycle	Tape & Reel	RoHS Code
TC75L	26MHz = 2600 8MHz = 0800 < 100MHz First 4 digit of frequency > 100MHz First 5 digit of frequency	0.5 = R 1.0 = P 1.5 = O 2.0 = N 2.5 = M 3.0 = L	3.3V = B 5.0V = A	0 ~ 50 = D -10 ~ +60 = F -20 ~ +70 = B -30 ~ +75 = W -30 ~ +85 = X -40 ~ +85 = K	None = N	CSW = B	None = X	None = X	Not specified = Z	Loose = L 1000 = C 3000 = D	-PF
Note: It is important to suffix the above part number with full frequency required to give a completed part number as illustrated below. Full Example Part Number : TC75L2600MBXNBXXZL-PF [26MHz] , TC75L1474MBXNBXXZL-PF [14.7456MHz]											

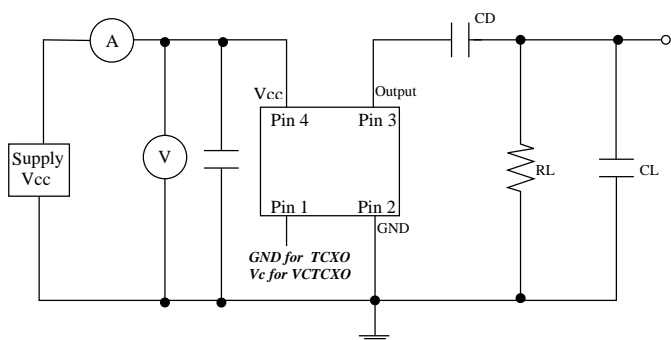
VC-TCXO part number generation													
VTC75L	1474	M	B	X	N	B	X	D	P	E	Z	L	-PF
ACT Series Code	Frequency (MHz) Ex. 14.7456MHz	Temp. stability (±ppm)	Supply voltage (V)	Operating temp. range (°C)	Frequency tuning (±ppm)	Output wave Form	Mechanical tuning (±ppm)	Electrical tuning (±ppm)	Polarity	Linearity	Duty Cycle	Tape & Reel	RoHS code
VTC75L	26MHz = 2600 8MHz = 0800 < 100MHz First 4 digit of frequency > 100MHz First 5 digit of frequency	0.5 = R 1.0 = P 1.5 = O 2.0 = N 2.5 = M 3.0 = L	3.3V = B 5.0V = A	0 ~ 50 = D -10 ~ +60 = F -20 ~ +70 = B -30 ~ +75 = W -30 ~ +85 = X -40 ~ +85 = K	Voltage control only = E	CSW = B	None = X	±5.0 = D	Positive = P	±10% = E	Not specified = Z	Loose = L 1000 = C 3000 = D	-PF
Note: It is important to suffix the above part number with full frequency required to give a completed part number as illustrated below. Full Example Part Number : TC75L1474MBXBXDPEZL-PF (14.7456MHz)													

(V)TCSW75LC Series

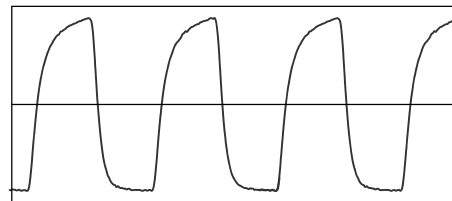
TCXO/VC-TCXO, 7.0 x 5.0mm, Clipped sine wave



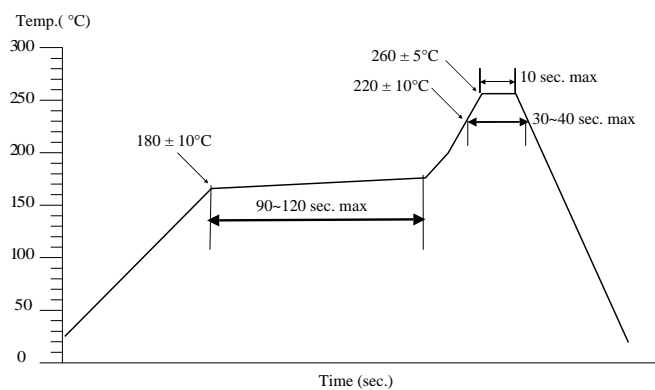
Test circuit



Clipped sine waveform



Solder reflow profile



Drawing control: (Internal use only)
Commodity code: 854370 90 99
Issue number : 1
Date : 02/01/2017
Internal reference : M6