

Type TV TCXO (10.0 ~ 40.0)MHz

- # Low power consumption
- # (5.0 x 3.2)mm height 1.15mm smd
- # VCTCXO available
- # External DC-CUT capacitor required, NPO 150pF recommended
- # RoHS Compliant Standard



Electrical Specification

Case Style			type TV: (5.0 x 3.2)mm, height 1.15mm
Frequency Range			
Stability –vs-	temperature		±(0.5 ~ 5.0)ppm
	Supply Voltage(±5%) change		±0.2ppm max.
	Load(±10%) change		±0.2ppm max.
	Aging		±1.0ppm per year max.
Supply voltage Vcc	+(2.8V ~ 3.3V)d.c.*	+5.0Vd.c.	
Supply current max.	10.000MHz ≤ f _o < 15.000MHz		1.5mA max.
	15.000MHz ≤ f _o < 26.000MHz		2.0mA max.
	26.000MHz ≤ f _o ≤ 40.000MHz		2.5mA max.
Phase Noise @13MHz	f _o +100Hz		-115dBc/Hz
	f _o +1kHz		-135dBc/Hz
	f _o +10kHz		-148dBc/Hz
Operating temperature			(0+55) °C ~ (-40+85)°C
Storage temperature			
Output			0.8Vp/p min. clipped sine wave @10kΩ//10pF

*26.000 ~ 40.000 MHz only for Vcc= 2.8 ~ 3.3V.

Ordering Information

Example type TV VC TCXO, 13.0MHZ, +3.3Vd.c., Pulling: ± 10 ppm, ± 2.5 ppm (-30 to +85) $^{\circ}$ C, Clipped Sine Wave

TFC PART NUMBER TV 13.0M E C D DS

'TV' type numner: TV= VC TCXO

'13.0MHz' frequency: 13.0MHz= 13.0MHz, frequency range from (10.0~40.0)MHz

'E' supply voltage: E = +3.3Vd.c.

'C' pulling range : C: ± 10.0 ppm

'D' frequency stability : D = ± 2.5 ppm

'D' Temperature range : D = (-30 to +85) $^{\circ}$ C

'S' Output logic and symmetry : S: clipped sine wave @10k Ω /10pF

Supply voltage E: +(2.8V ~ 3.3V)d.c. , C: +5Vd.c.

Pulling range A: ± 5.0 ppm, B: ± 8.0 ppm, C: ± 10.0 ppm, T: TCXO , Vcon range: 0.5V ~ 2.5V

Frequency stability A: ± 0.5 ppm, B: ± 1.0 ppm, P: ± 1.5 ppm, C: ± 2.0 ppm, D: ± 2.5 ppm, E: ± 3.0 ppm
F: ± 4.0 ppm, G: ± 5.0 ppm

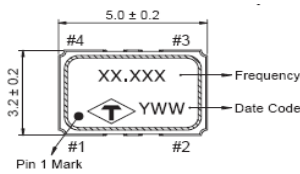
Temperature stability B: (0 to +55) $^{\circ}$ C, I: $\pm(-10$ to +60) $^{\circ}$ C, C: (-20 to +70) $^{\circ}$ C, D: (-30 to +85) $^{\circ}$ C

L: (-40 to +85) $^{\circ}$ C

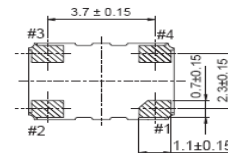
Output logic and symmetry S: clipped sine wave @10k Ω /10pF

TV dimensions(mm)

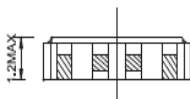
[TOP VIEW]



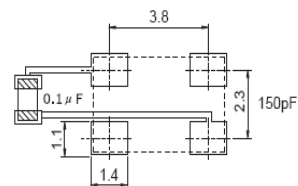
[BOTTOM VIEW]



[SIDE VIEW]



[RECOMMENDED SOLDERING PATTERN]



- #1 Vcon: VC-TCXO
GND: TCXO
- #2 GND
- #3 Output
- #4 V_{DD}