

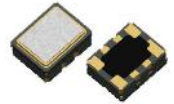
## TCXO/VCTCXO ULTRA MINIATURE SMD (3.2 x 2.5 x 1.48mm)

### FEATURES:

- STRATUM 3 ( $\pm 4.6$ ppm over 20 years)
- LOW G SENSITIVITY
- CMOS AND CSW OUTPUTS AVAILABLE

### APPLICATIONS:

- STRATUM 3
- FEMTOCELL
- BASE STATIONS

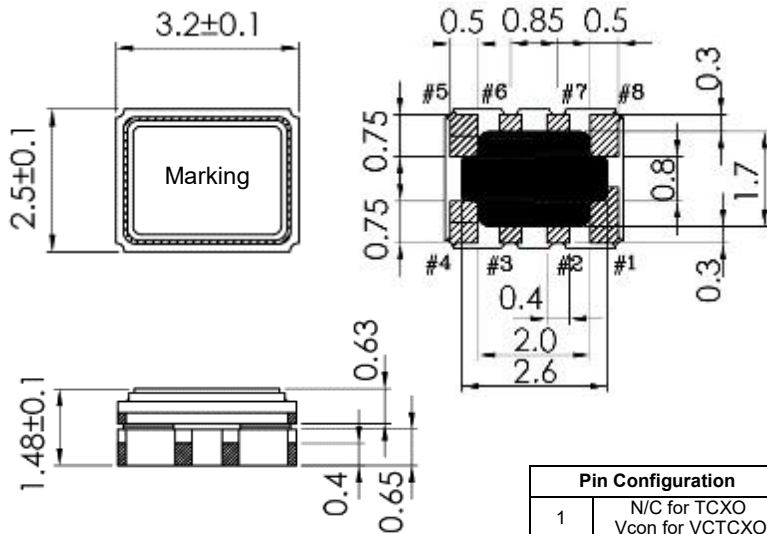


### ■ SPECIFICATION

PARAMETER		MIN.	TYP.	MAX.	UNIT	NOTE	
FREQUENCY RANGE		5		52	MHz		
FREQUENCY STABILITY	OVERALL vs 20 YEARS			$\pm 4.6$	ppm	Includes calibration @25°C; Vcc $\pm 5\%$ ; load $\pm 10\%$ ; stability vs temperature; reflow soldering; 20 years aging	
	vs. -20°C to 70°C			$\pm 0.1$	ppm	Ref to (Fmax+Fmin)/2	
	vs. -40°C to 85°C			$\pm 0.2$	ppm	Ref to (Fmax+Fmin)/2	
	HOLDOVER			0.37	ppm	Includes 24hours aging , Vcc $\pm 5\%$ and stability vs temperature	
OPERATING TEMPERATURE RANGE		-40		+85	°C	See P/N guide for options	
STORAGE TEMPERATURE RANGE		-55		+125	°C		
SUPPLY VOLTAGE 2.5V		2.375	2.5	2.625	V		
SUPPLY VOLTAGE 3.3V		3.135	3.3	3.465	V		
SUPPLY CURRENT	CMOS			7.5	mA		
	CSW			5.0	mA		
OUTPUT	LOGIC FAMILY	CMOS / Clipped Sine wave				CSW without DC-cut capacitor	
	LOAD	CMOS	15pF				
		CSW	10k $\Omega$ //10pF				
	LEVEL	CMOS (V <sub>OH</sub> )	0.9 x V <sub>DD</sub>			V	
		CMOS (V <sub>OL</sub> )			0.1 x V <sub>DD</sub>	V	
		CSW	0.8			V <sub>P-P</sub>	
	SYMMETRY (DUTY CYCLE)		45		55	%	For CMOS
	RISE AND FALL TIME (Tr/Tf)				10	nS	For CMOS
START-UP TIME				5	mS		
G SENSITIVITY			0.3	0.5	ppb/G	$\Gamma$ , 20-2000Hz	
FREQUENCY DEVIATION		$\pm 5$			ppm	See P/N guide for other options	
CONTROL VOLTAGE		0		2.5	V	Center = 1/2 V <sub>DD</sub>	
INPUT IMPEDANCE		100			K $\Omega$		
SLOPE		Positive					
PHASE NOISE @ 10MHZ	100Hz			-130	dBc/Hz	Bypass capacitor and 33nF on pin 7 required for optimal performance	
	1kHz			-145	dBc/Hz		
	10kHz			-154	dBc/Hz		

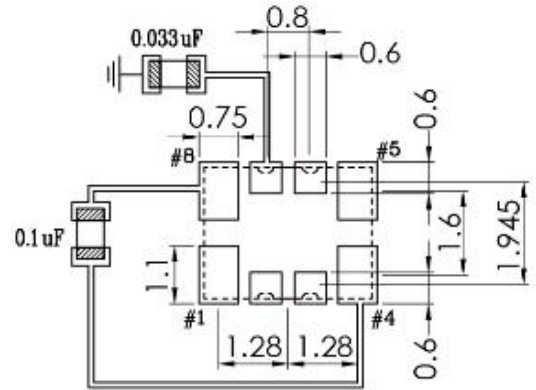
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## PACKAGE DIMENSIONS (mm)

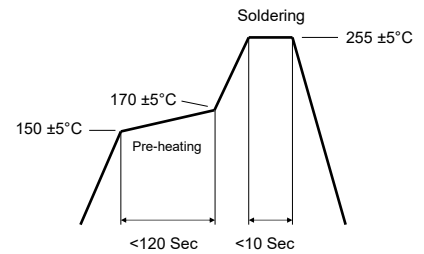


Pin Configuration	
1	N/C for TCXO Vcon for VCTCXO
2	NC
3	NC
4	GND
5	OUTPUT
6	TRI-STATE
7	FILTER
8	VDD

## SOLDER PATTERN (mm)

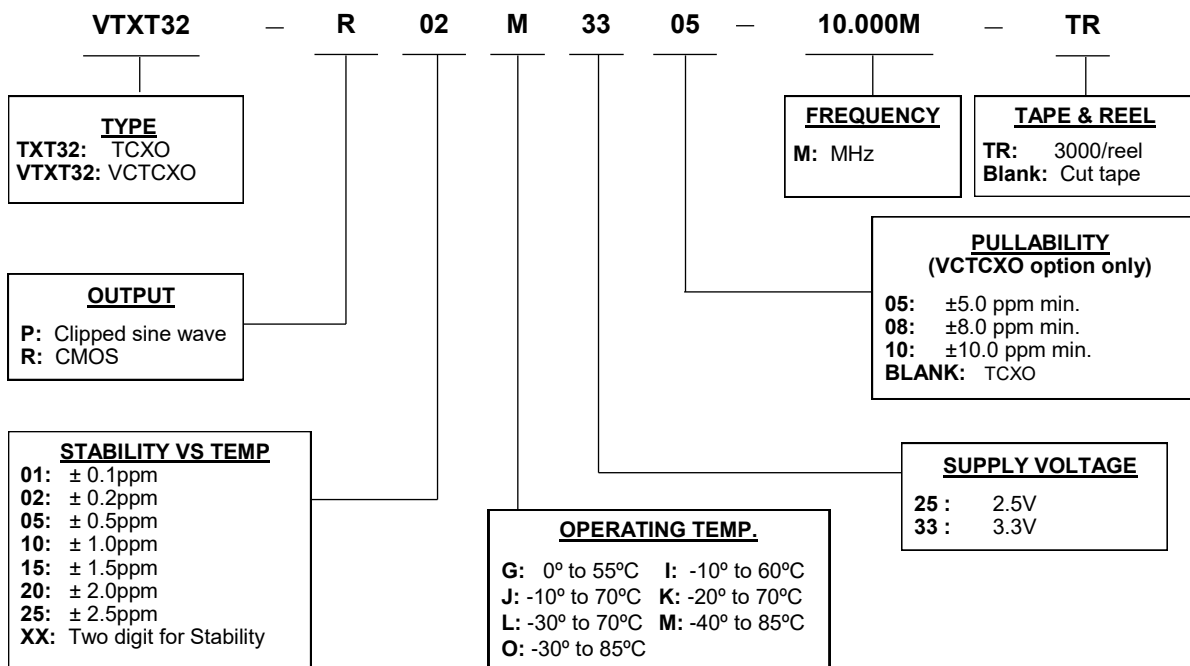


## REFLOW PROFILE



Note: Consult factory for detail

## PART NUMBERING GUIDE



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