

## (VC)TCXO PCB SMD (7.0 x 5.0 x 2.5mm)

### FEATURES:

- HIGH FREQUENCY UPTO 250.000MHz
- CMOS OUTPUT
- TIGHT STABILITY UP TO  $\pm 1.0\text{ppm}$  vs.  $-40^{\circ}\text{C}$  TO  $85^{\circ}\text{C}$

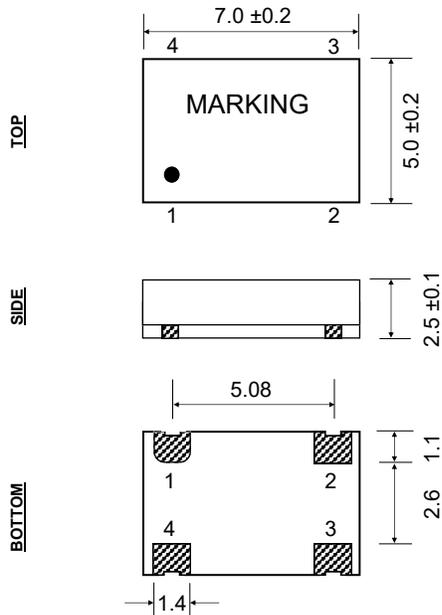


### ■ SPECIFICATION

PARAMETER		MIN.	TYP.	MAX.	UNIT	NOTE
FREQUENCY RANGE		10.000		250.000	MHz	
FREQUENCY TOLERANCE				$\pm 2.0$	ppm	@ $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$
FREQUENCY STABILITY	vs. TEMPERATURE RANGE	$\pm 0.5^*$	$\pm 1.0$	$\pm 5.0$	ppm	See P/N guide for other options
	vs. LOAD $\pm 10\%$			$\pm 0.2$	ppm	
	vs. SUPPLY VOLTAGE $\pm 5\%$			$\pm 0.2$	ppm	
	vs. REFLOW			$\pm 1.0$	ppm	1 reflow cycle; measured after 24 hrs
	vs. AGING FIRST YEAR			$\pm 2.0$	ppm	@ $25^{\circ}\text{C}$
	vs. AGING 10 YEARS			$\pm 10$	ppm	
OPERATING TEMPERATURE RANGE		-40		85	$^{\circ}\text{C}$	See P/N guide for other options
STORAGE TEMPERATURE RANGE		-55		150	$^{\circ}\text{C}$	
SUPPLY VOLTAGE		3.135	3.3	3.465	V	
SUPPLY CURRENT		$V_{DD} = 3.3\text{V}$		35.0	mA	
OUTPUT	LOGIC FAMILY	CMOS				
	LOAD	15pF				
	LEVEL LOGIC '1' ( $V_{OH}$ )	$0.9 \times V_{DD}$			V	
	LEVEL LOGIC '0' ( $V_{OL}$ )			$0.1 \times V_{DD}$	V	
	SYMMETRY (DUTY CYCLE)	45		55	%	
	RISE AND FALL TIME ( $T_r/T_f$ )		1.5	3.0	nS	
	START-UP TIME			5.0	mS	
FREQUENCY DEVIATION		$\pm 8$			ppm	@ $V_c = 1.5 \pm 1.0\text{V}$
CONTROL VOLTAGE		0.5	1.5	2.5	V	
SLOPE		Positive				
LINEARITY				10	%	
HARMONICS				-5.0	dBc	
INPUT IMPEDANCE			770		K $\Omega$	
PHASE JITTER			0.9		pS	(12KHz ~ 20MHz)
PHASE NOISE	10Hz		-65		dBc/Hz	@ 156.25MHz
	100Hz		-92		dBc/Hz	
	1kHz		-108		dBc/Hz	
	10kHz		-114		dBc/Hz	
	100kHz		-117		dBc/Hz	
	1MHz		-139		dBc/Hz	
	10MHz		-147		dBc/Hz	

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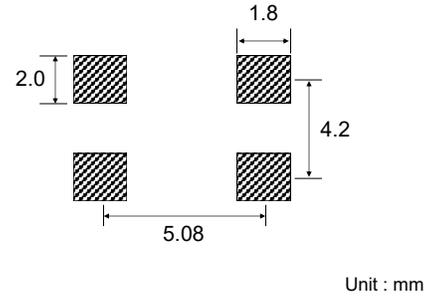
## PACKAGE DIMENSIONS



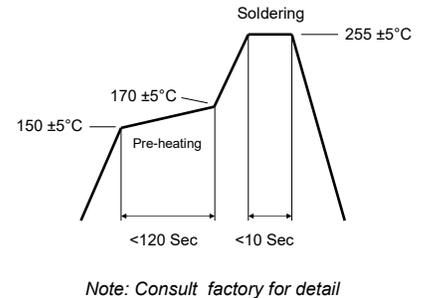
Unit : mm

Pin Configuration	
1	N/C or Vc
2	GND
3	Output
4	V <sub>DD</sub>

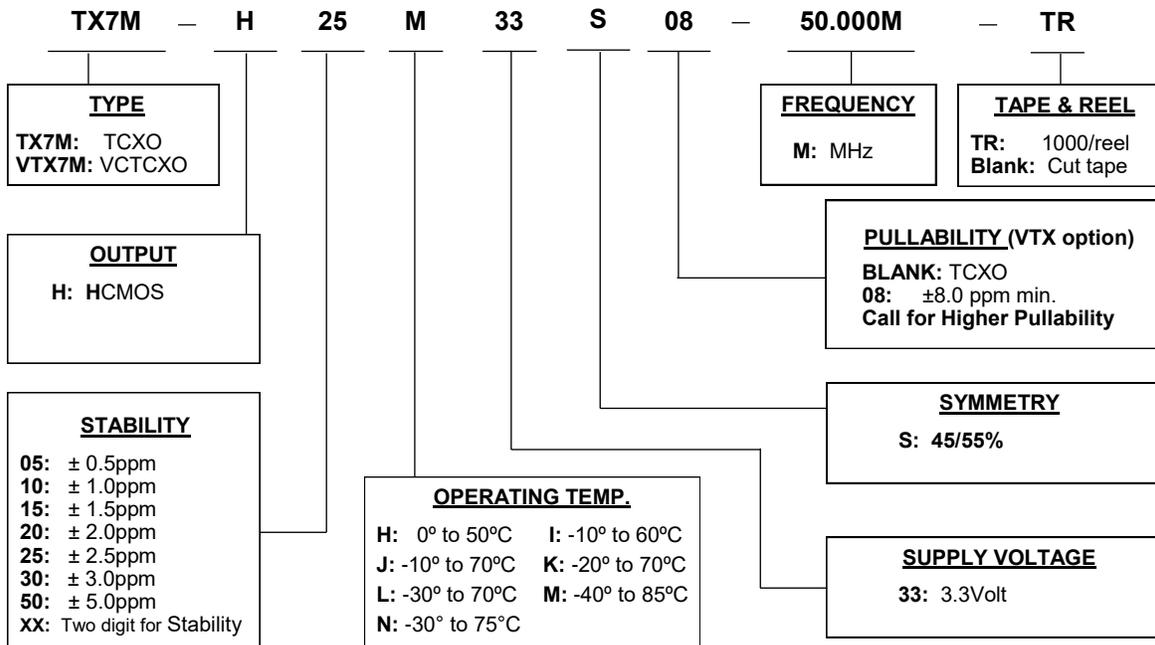
## SOLDER PATTERN



## REFLOW PROFILE



## PART NUMBERING GUIDE



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