

## MINIATURE SMD HCMOS/TTL OSCILLATOR (5.0 x 3.2 x 1.3mm)

### FEATURES:

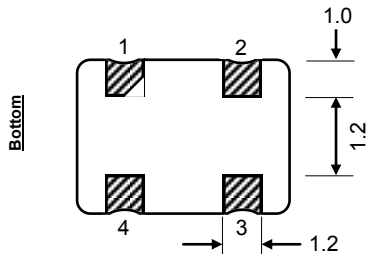
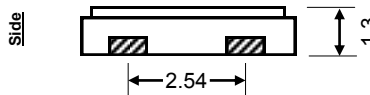
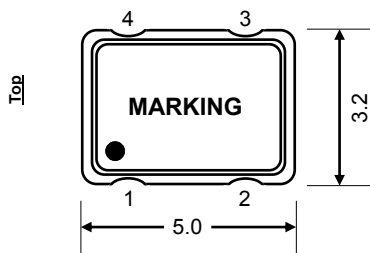
- WIDE FREQUENCY RANGE
- LOW VOLTAGE / LOW CURRENT
- LOW COST



### ■ SPECIFICATION

<b>FREQUENCY RANGE</b>	312kHz ~ 60MHz	25kHz ~ 165MHz	25kHz ~ 220MHz	25kHz ~ 160MHz
<b>FREQUENCY STABILITY</b>	±10ppm ~ ±100ppm			
<b>OPERATING TEMPERATURE RANGE</b>	STD: 0°C ~ 70°C, Option: -40°C ~ 85°C (See P/N guide for other options)			
<b>STORAGE TEMPERATURE RANGE</b>	-55°C ~ 125°C			
<b>SUPPLY VOLTAGE ±10%</b>	1.0V <sub>DC</sub>	1.8V <sub>DC</sub>	2.5~3.3V <sub>DC</sub>	5.0V <sub>DC</sub>
<b>SUPPLY CURRENT</b>	4mA max.	25mA max.	40mA max.	35mA max.
<b>OUTPUT</b>	<b>LOGIC FAMILY</b>	HCMOS, TTL, CMOS/TTL		
	<b>LOAD</b>	15pF typ. (30pF, 50pF available)		
	<b>LEVEL LOGIC '1' (V<sub>OH</sub>)</b>	HCMOS: 0.9 x V <sub>DD</sub> min.    TTL: 2.4V <sub>DC</sub> min.		
	<b>LEVEL LOGIC '0' (V<sub>OL</sub>)</b>	HCMOS: 0.1 x V <sub>DD</sub> max.    TTL: 0.4V <sub>DC</sub> max.		
	<b>SYMMETRY (DUTY CYCLE)</b>	40% / 60% @ 1/2V <sub>DD</sub> level, Option: 45% / 55%		
	<b>RISE AND FALL TIME (Tr/Tf)</b>	1.0nS typ. , 8.0nS max.		
<b>STAND-BY VOLTAGE</b>	<b>ENABLE (ViH)</b>	0.7 x V <sub>DD</sub> ≤ ViH ≤ V <sub>DD</sub> or N/C		
	<b>DISABLE (ViL)</b>	ViL ≤ 0.3 x V <sub>DD</sub>		
<b>ENABLE / DISABLE DELAY TIME</b>	10mS max.			
<b>AGING @ 25°C ± 3°C</b>	±3.0ppm / 1 <sup>st</sup> year max.			
<b>PHASE JITTER RMS (12kHz ~ 20MHz)</b>	1.0pS max.			

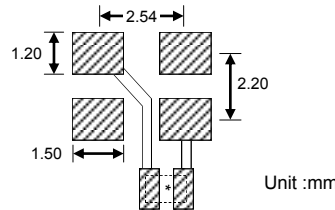
### ■ PACKAGE DIMENSIONS



Unit : mm

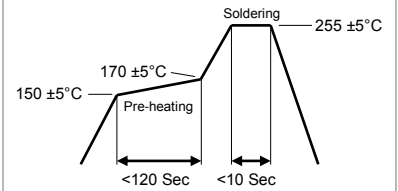
Pin Configuration	
1	En/Dis
2	GND
3	Output
4	V <sub>DD</sub>

### ■ SOLDER PATTERN



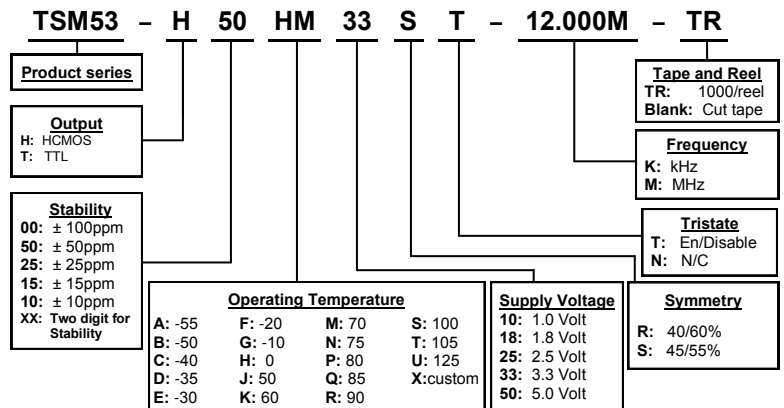
\*0.01µF to 0.1µF bypass capacitor recommended

### ■ REFLOW PROFILE



Note: Consult factory for detail

### ■ PART NUMBERING GUIDE



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.