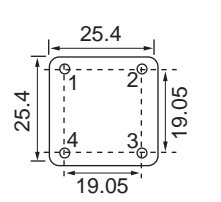
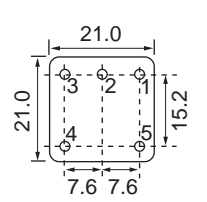
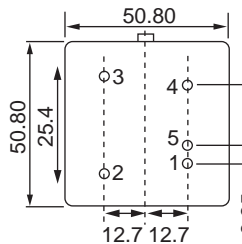
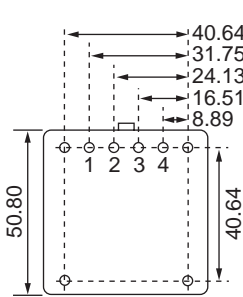
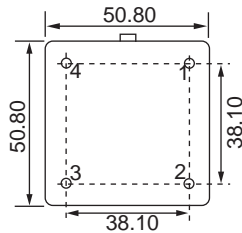
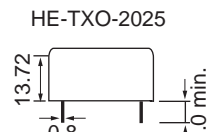
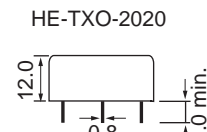
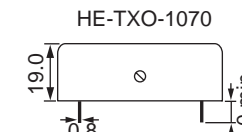
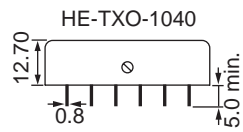
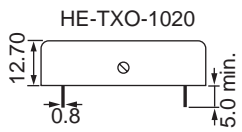


## ELECTRICAL SPECIFICATIONS

PARAMETERS	HE-TXO-1020 HE-TXO-1040	HE-TXO-1070	HE-TXO-2020 HE-TXO-2025
NOMINAL FREQUENCY (MHz)	1 - 120 MHz (HCMOS/TTL) 3 - 33 MHz (SINE)	1 - 120 MHz (HCMOS/TTL) 3 - 100 MHz (SINE)	1 - 120 MHz (HCMOS/TTL)
FREQUENCY TOLERANCE	±1.0 PPM @ 25°C ± 2°C		
OPERATING TEMPERATURE	See table below (reference 25°C)		
SUPPLY VOLTAGE STABILITY	±0.1 PPM / Volt		
FREQUENCY ADJUSTMENT	Internal Trimmer		2020: By external 10K variable resistor / Internal Trimmer 2025: Internal Trimmer
LONG TERM AGING RATE	±1 PPM / Year Max.		
VOLTAGE (±5%)	+10 to +15 V DC	+5 to 15V DC: HCMOS/TTL +9 to 15V DC: SINE	+5 to 13 V DC
CURRENT	20 mA max < 20 MHz 30 mA max. 20 to 50 MHz 50 mA max. > 50 MHz		
OUTPUT	HCMOS, TTL, SINE (+7 dBm into 50 Ω)		HCMOS, TTL
RISE/FALL TIME (HCMOS/TTL)	10 nS max.		
DUTY CYCLE (HCMOS/TTL)	40 to 60 %		

PART NO.	STABILITY	TEMPERATURE RANGE - PART NUMBER DESIGNATION (EX: HE-TXO-1010-20.000-.5A)							
		A	B	C	D	E	F	G	H
		<b>0 + 50 °C</b>	<b>0 + 60 °C</b>	<b>0+70 °C</b>	<b>-10+60 °C</b>	<b>-10+70 °C</b>	<b>-20+70 °C</b>	<b>-30+80 °C</b>	<b>-30+85 °C</b>
.5	±0.5 PPM	.5A	.5B	N/A	N/A	N/A	N/A	N/A	N/A
1	±1 PPM	1A	1B	1C	1D	1E	1F	N/A	N/A
1.5	±1.5 PPM	1.5A	1.5B	1.5C	1.5D	1.5E	1.5F	1.5G	1.5H
2	±2.0 PPM	2A	2B	2C	2D	2E	2F	2G	2H

## MECHANICAL DRAWING



Pin Connections  
(1020, 1040, 2525 Series)  
1: DC Input  
2: Ground  
3: No Connection  
4: Output

Pin Connections  
1: Output  
2: DC Input  
3: Ground  
4: Ground  
5: No Connection

Pin Connections  
1: Ground  
2: Output  
3: DC Input  
4: Reference Voltage Output  
5: Frequency Control Input

Unit: mm