

Type VH-W
4 pin(8 pin DIL layout)
(1.5 ~ 50)MHz

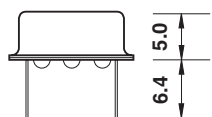
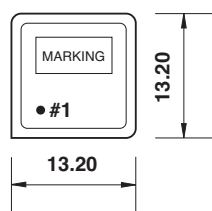
A small resistance weld shielded metal case suitable for custom specifications and non-standard frequencies with extended custom performance criteria.

Wide pulling range, custom frequencies, good linearity

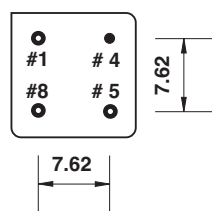
Electrical specification		
	+3.3Vd.c.	+5.0Vd.c.
Frequency range	(1.5 ~ 50)MHz	
Stability *	±(25 ~ 50)ppm, temperature range dependent	
Pulling range	±100ppm min.	
Control voltage V_t	(+1.65 ±1.35)Vd.c.	(+2.5 ±2.0)Vd.c.,
Supply current max. (1.5 ~ 20)MHz (20 ~ 50)MHz	20mA 30mA	30mA 40mA
Output	TTL, CMOS	
Symmetry	(45 ~ 55)% - (40 ~ 60)%	
Rise and fall time: ** (1.5 ~ 20)MHz (20 ~ 50)MHz	8nano. sec. max. 5nano. sec. max.	
Operating temperature	(-10 +60)°C, (-20 +70)°C, (-40 +85)°C	
Ageing	±5ppm first year max.	
Storage temperature	(-55 +125)°C	

* inclusive of calibration tolerance at +25°C, temperature tolerance, supply voltage variation, load variation, first year ageing, shock and vibration.
 ** measured with an output load of 15pF, between (10 ~ 90)% V_{cc}

VH-W dimensions(mm), through hole



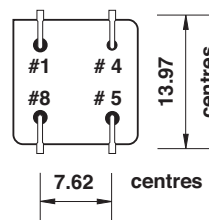
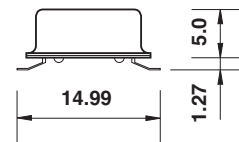
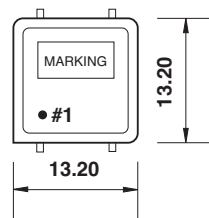
Pin diameter 0.45mm



Pins viewed from bottom

- Pin connections**
- # 1 voltage control V_t
 - # 4 case and ground
 - # 5 output
 - # 8 V_{cc}

VH-W dimensions(mm), gull wing



Pads viewed from bottom
 Pad size (1.143 x 0.635)mm

- Pad connections**
- # 1 voltage control V_t
 - # 4 case and ground
 - # 5 output
 - # 8 $+V_{cc}$

Type VH-W
Ordering information

EXAMPLE	type VH-W VCXO oscillator, 40.00MHz, $\pm 25\text{ppm}(-20 +70)^{\circ}\text{C}$ frequency stability, $\pm 100\text{ppm}$ pulling range, +3.3Vd.c., 8 pin DIL package, output CMOS 15pF, symmetry (45 ~ 55)%
TFC PART NUMBER	VHW 40.0M E M C J *
VHW	type: VH - W = VCXO type VH-W, 4 pin (8 pin DIL)
40.0M	frequency: 40.0MHz, frequency range (1.5 ~ 50)MHz
E	supply voltage: E = +3.3Vd.c.,
M	frequency stability: M = $\pm 25\text{ppm}$
C	temperature range: C = $(-20 +70)^{\circ}\text{C}$
J	output logic and symmetry: J = CMOS 15pF, (45 ~ 55)%
OPTIONS	
supply voltage	E: +3.3Vd.c., C: +5.0Vd.c.
frequency stability	B: $\pm 10\text{ppm}$, C: $\pm 20\text{ppm}$, : M = $\pm 25\text{ppm}$, P = $\pm 50\text{ppm}$
temperature range	I: $(-10 +60)^{\circ}\text{C}$, C: $(-20 +70)^{\circ}\text{C}$, L: $(-40 +85)^{\circ}\text{C}$
* GW	add suffix GW for gull wing pre-form of leads