

## QEAO Series Automotive Grade, SMD Oscillator, 2.5x2.0x1.0mm, LVCMOS

Frequency			1.0MHz to 160.000MHz			
Output Leve	1					
Level			'0'=0.1 Vdd Max., '1'=0.9 Vdd Min.			
Duty Cycle			50% $\pm$ 5% (Measured at 50% of Waveform)			
Rise/ Fall Time			6 nS Max. (Measured from 20% to 80% waveform)			
Output Load			15 pF Maximum			
Stability						
Over all Frequency Stability			See Frequency Stability below			
			(Includes temperature, voltage, load stability, aging for 1 <sup>st</sup> year at 25°C and initial			
			tolerance at shipping @ 25° C)			
Supply Voltage			$\frac{1.8V, 2.5V, 2.8V, 3.0V, 3.3V \pm 10\%}{20 \text{ mA May} (No Load)}$			
Current			20 mA Max (No Load)			
Operating			See table below			
Storage						
Environment			-55 C 10 +125 C			
Sealing			4×10-9 Paem <sup>3</sup> /s Max (by Ha look detector)			
Shock Desistance			75cm(Guaranteed for 2 free falls on hardwood surface from 75cm height)			
Down Hoot			40,220, 00, 05% DU (Connected 1,000U et 40,220, 00, 05% DU)			
Damp Heat			40±2°C, 90~95% RH (Guaranteed 1,000H at 40±2°C, 90~95% RH)			
Jitter						
RMS Period Jitter			5pSec Max. (Vdd = $2.5v, 2.8V, 3.0V, 3.3V$ )			
			6pSec Max. (Vdd = 1.8V)			
Peak to Peak Period Jitter			30pSec Max. (Vdd = 2.5v, 2.8V, 3.0V, 3.3V)			
			40pSec Max. (Vdd = 1.8V)			
Standby Current			10uA Max. (Disable Output, High Impedance)			
Part Number Guide Sample Part		#: (	QEAO-3E1H-25.000	1		
	Supply Voltage	Operating Temp	erature Range	Stability (in ppm)	Function	Frequency
QEAO	1 = 1.8V	$C = -20^{\circ}C \text{ to } +70^{\circ}C$		$1 = \pm 100$	H = Output Enable	25.000 MHz
	2 = 2.5 V	$E = -40^{\circ}C$ to $+85^{\circ}C$		$2 = \pm 50$		
$6 = 2.8V$ $I = -40^{\circ}C$ to $+1$ $4 = 3.0V$ $J = -40^{\circ}C$ to $+12$		$I = -40^{\circ}C \text{ to } +105^{\circ}C$		$3 = \pm 25$		
		25°C				
	3 = 3.3 V					



QVS TECH INC 6965 El Camino Real, Ste 105 Carlsbad, CA 92009 Phone: 760-929-8677 Fax: 760-929-8077 email: <u>sales@qvstech.com</u> Specifications subject to change without notice (Rev IR)