

# QEO Series



## SMD Oscillator, 2.5x2x0.8mm, TTL/HCMOS

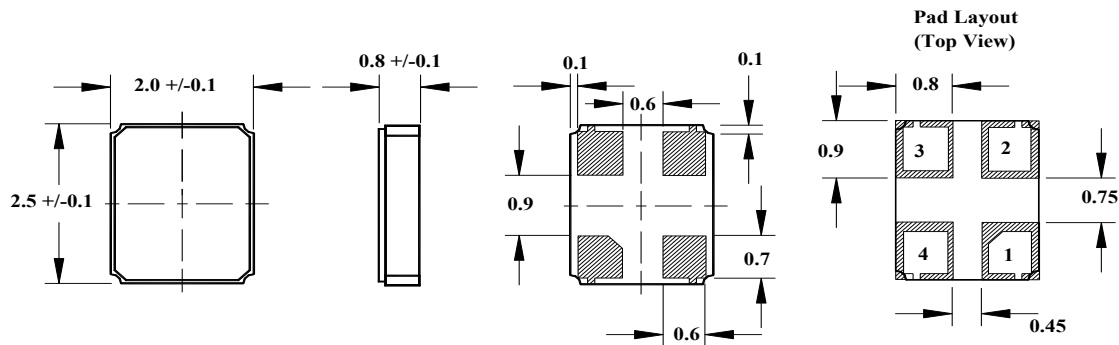
Frequency	1.000 MHz to 60.000 MHz		
Output Level	TTL		HCMOS
Level	'0'= 0.4 VDC Max., '1'=2.4 VDC Min.		'0'=0.1 Vcc Max., '1'=0.9 Vcc Min.
Duty Cycle	Specify 50% ± 10% or ± 5%		
Rise/ Fall Time	5 nS Max. for Vcc = +3.3 VDC		
Output Load	3 TTL		15 pF
Stability			
Over all Frequency Stability	See Frequency Stability Table		
Enable/Disable Time	250 nS Max.		
Supply Voltage	2.7 VDC ±0.2 V	3.0 VDC ±0.3 V	3.3 VDC ±0.3 V
Current	5 mA to 10 mA Typ.*		
Temperature			
Operating	See Operating Temperature Table		
Storage	-40° C to +85° C		

Part Number Guide		Sample Part #:		QEO-3ATA1T-20.000			
	Input Voltage	Operating Temperature	Symmetry (Duty Cycle)	Output	Stability (in ppm)	Enable/Disable	Frequency
QEO	4 = 3.3 V	A = 0° C to~ +70° C	T = 45/55 Max.	A = 3 TTL /15pF HCMOS	1 = ± 100	T = Enable High	20.000 MHz
	3 = 3.0 V	B = -10° C to +60° C	S = 40/60 Max.	B = 3 TTL	2 = ± 50		
	2 = 2.7 V	C = -10° C to +70° C		C = 15pF HCMOS	3 = ± 25**		
		D = -20° C to +70° C		D = ACMOS			
		E = -30° C to +75° C					
		F = -40° C to +80° C					
		G = -40° C to +85° C					

\* Frequency and supply related parameters.

\*\* -10° C to +60° C guaranteed operation

### Dimensions: (Unit=mm)



Tri-State Function	
Pin 1 Open	Enable
Pin 1 ≥ 70% Vcc	Enable
Pin 1 ≤ 30% Vcc	Disable

Pin	Connection
1	E/D
2	GROUND
3	OUTPUT
4	VCC

### QVS TECH INC