



## TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR - TXCO

*World Technologies Ltd. TCXO's are designed for low power consumption to provide a high stability frequency reference over a pre-determined wide temperature range. WTL offers various package sizes and features optimized for your particular application.*

The TXCO characteristics can be cost effective on the following specifications and must be considered when specifying these parameters.

**Frequency Range:** Specify within range of 9.000000MHz to 50.000000 MHz.

**Frequency Stability:** The best and most achievable stabilities (for AT cut crystals) are  $\pm 1$  ppm,  $\pm 1.5$  ppm,  $\pm 2.0$  ppm, up to  $\pm 5.0$  ppm. Typically, a  $\pm 5.0$  ppm stability over a temperature range of (0°C to 50°C) will cost less than  $\pm 2.5$  ppm at (-30°C to 75°C).

**Operating Temperature Range:** You may select from the technical data sheet and this parameter can be cost effective.

**Input Voltage:** Standard input is +5 volts DC  $\pm 5\%$ . (Optional input is =3 volts DC  $\pm 5\%$  for battery operated portable applications. There is no extra charge for a 3 Volt circuit.)

**Package Style:** WTL offers TCXO's in various through hole and surface mount packages. Most economical are the package style A & B. Package style C & D are not pictured, however, have the same foot print as style B.

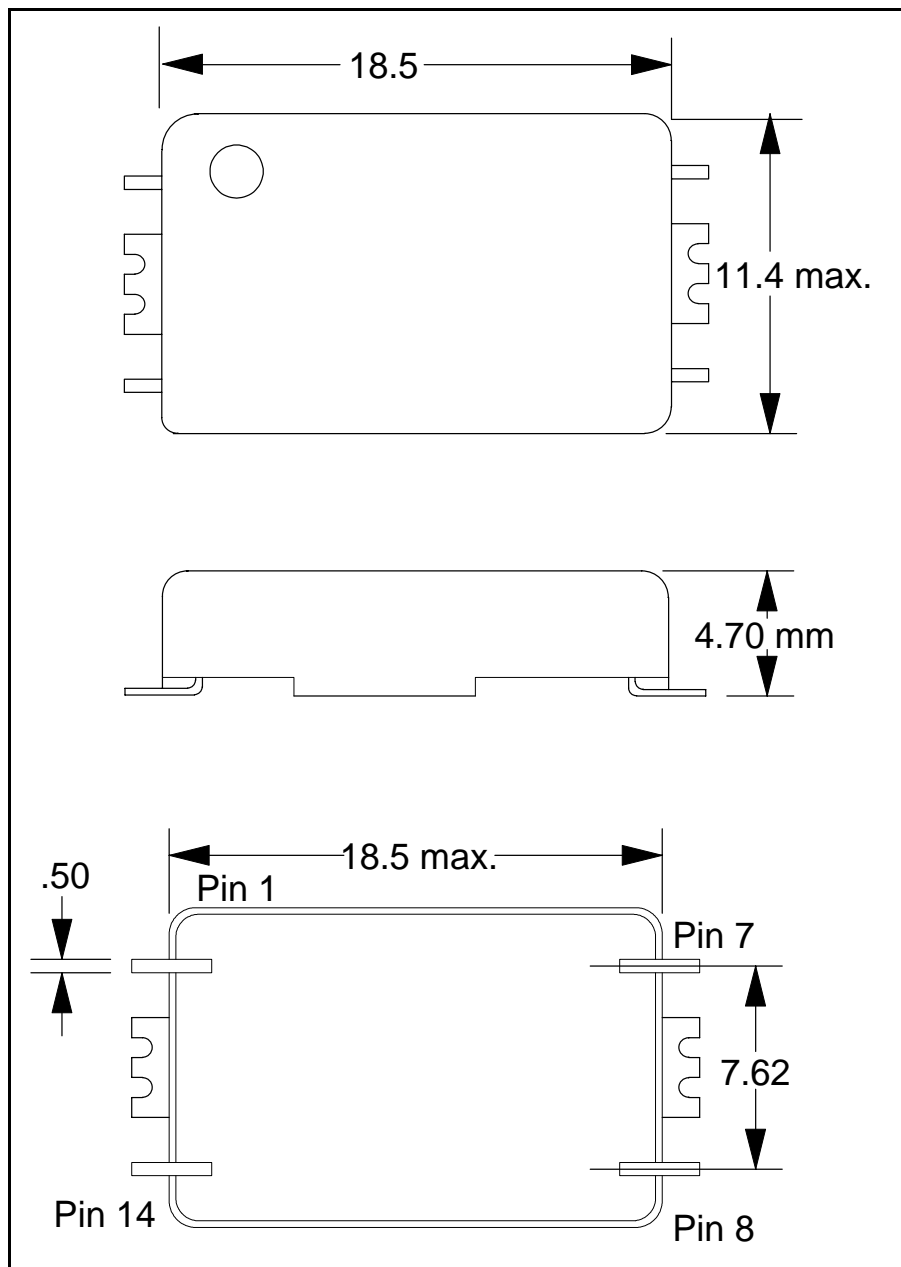


Temperature Compensated Crystal Oscillators

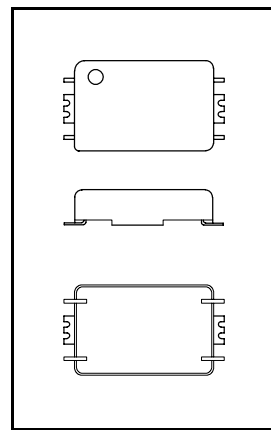
WTL 8000 Series

SPECIFICATIONS	ELECTRICAL	MECHANICAL
Frequency Range	9.000000MHz to 50.000000MHz	<p><b>OUTLINE DIMENSIONS</b></p> <p>(A) <b>SMD (4.7 HEIGHT)</b></p> <p>(B) <b>DIP (4.7 HEIGHT)</b></p>
Standard Freq (MHz)	9.0, 9.6, 10.0, 10.24, 12.0, 12.8, 15.369, 20.456, 50.000	
Frequency Stability	① ± 1.5 ppm	
	② ± 2.0 ppm	
	③ ± 2.5 ppm	
	④ ± 3.0 ppm	
	⑤ ± 3.5 ppm	
	⑥ ± 5.0 ppm	
Operating Temperature Range	① 0°C to +50°C	
	② -10°C to +60°C	
	③ -20°C to +70°C	
	④ -30°C to +60°C	
	⑤ -30°C to +75°C	
	⑥ -35°C to +80°C	
	⑦ -40°C to +85°C	
Input Volt. Change	±0.3 ppm / ±5V ±5%	
Input Voltage	① 5V ±5% (Standard)	
	② 3V ±5% (For battery applications.)	
Output Voltage	1V <sub>P-P</sub> min	
Current Consumption	1.5mA, 2mA max	
Load	10K //10pf	
Aging	±1ppm/year	
Frequency Adjustment	Internal Trimmer ±3ppm min	
Package Style	(A) - SMD (4.7 mm Height)	
	(B) - DIP (4.7 mm Height)	
	(C) - DIP (5.8 mm Height)-Refer to "B"	
	(D) - DIP (7.5 mm Height)-Refer to "B"	
	(E) - SMD (3.7 mm Height)	
	(F) - SMD (3.7 mm Height)	
	(G) - SMD (2.0 mm Height)	
P/N code	WTL - 8 □ □ □ □	
<b>WTL8351G-10</b>	□ Package	
	□ Input voltage	
	□ Operating temperature	
	□ Freq. stability	
		<p><b>PIN CONNECTION</b></p> <p>1. No Connection</p> <p>7. GND and CASE</p> <p>8. Output</p> <p>14. Vcc</p>

PACKAGE STYLE "A"



Enlarged View

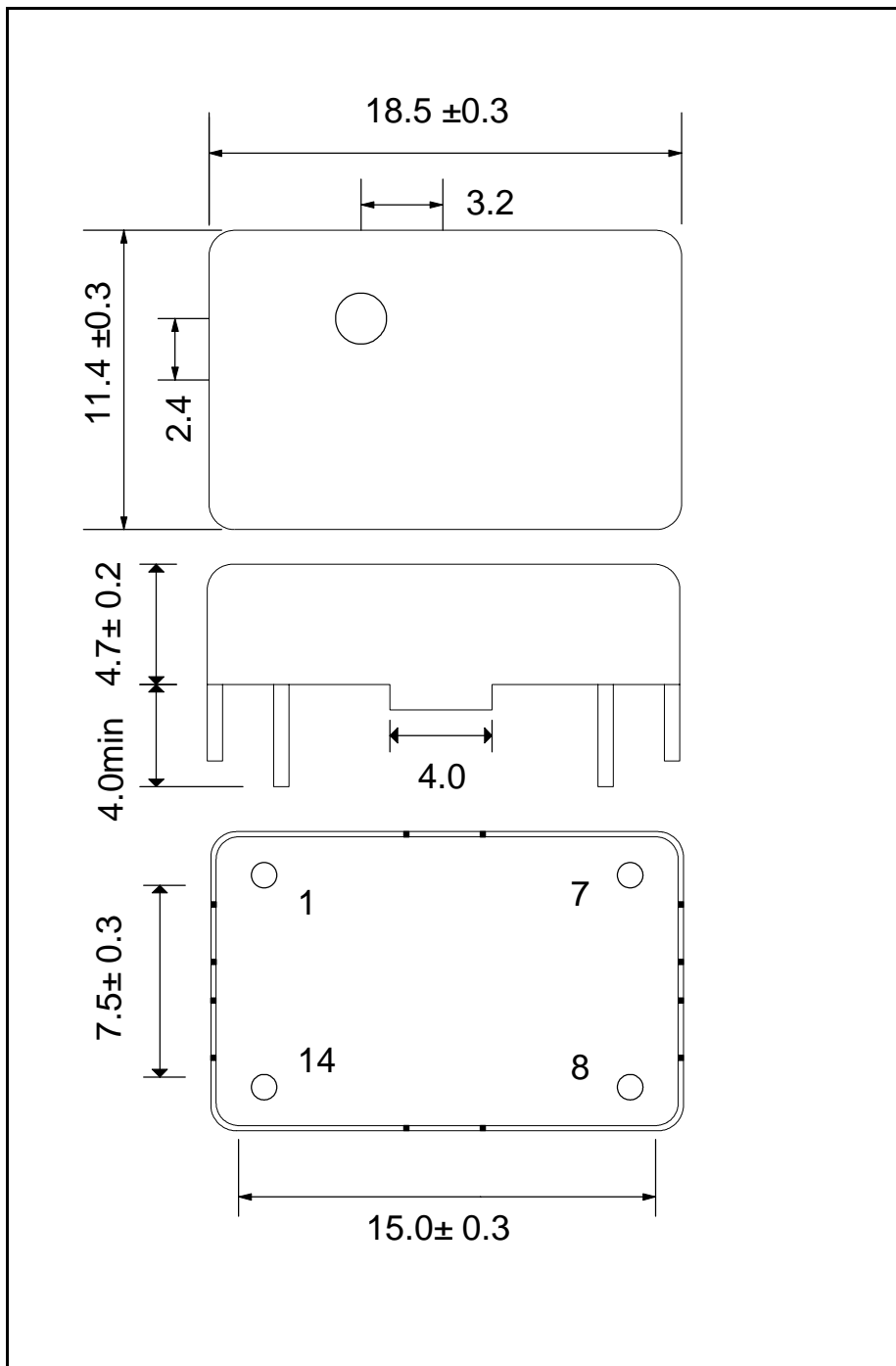


Actual Size Shown Above  
1=1

Pin	Connection
1	N.C.
7	GND
8	Output
14	Vcc

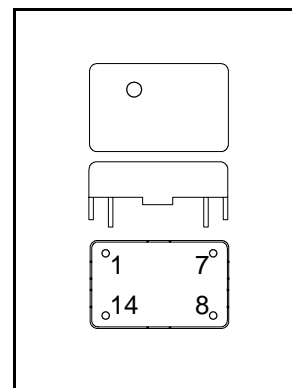


### PACKAGE STYLE "B"

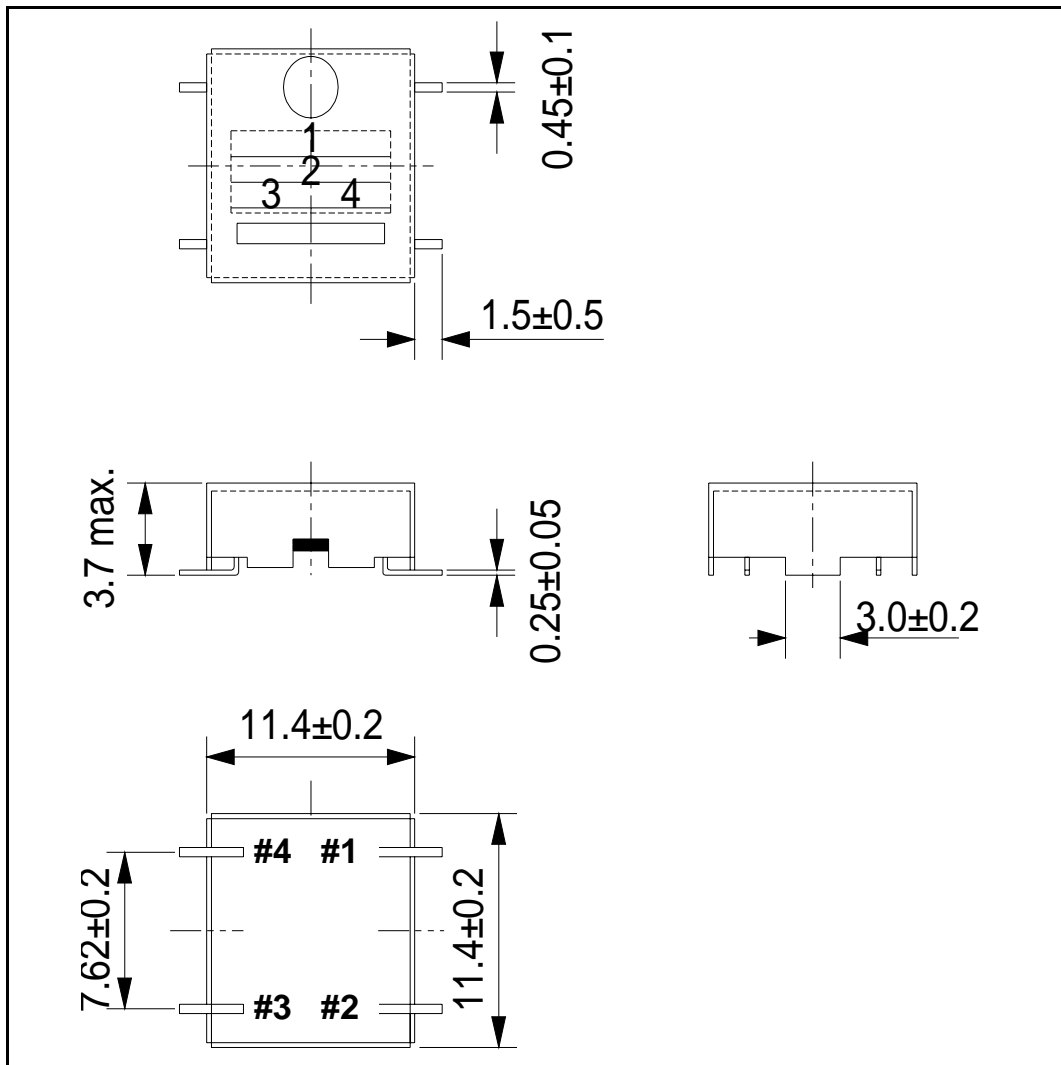


Enlarged View

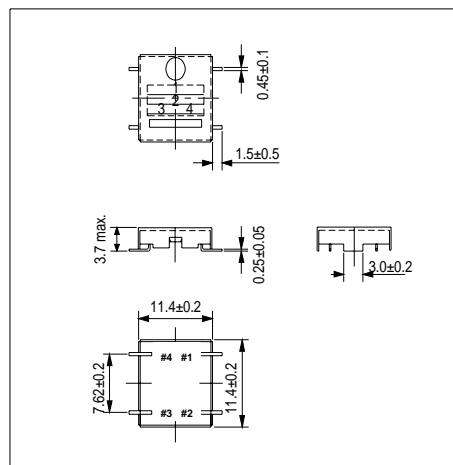
Pin	Connection
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7	GND
8	Output
14	Vcc



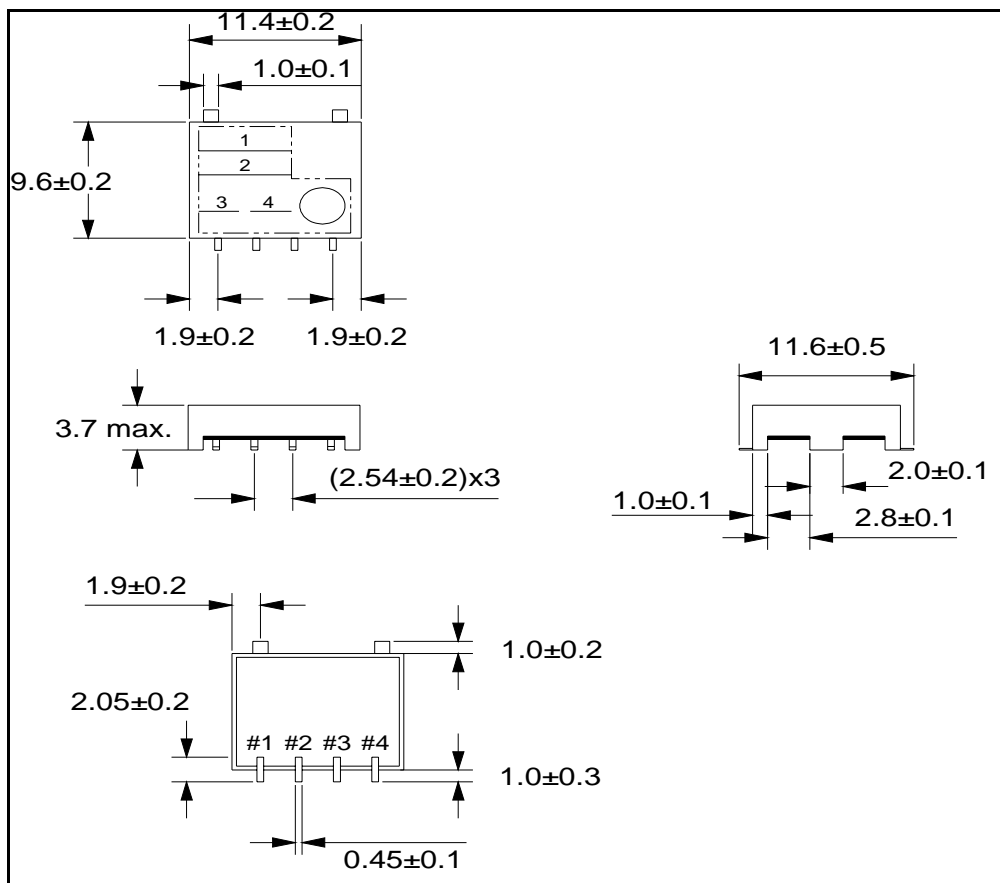
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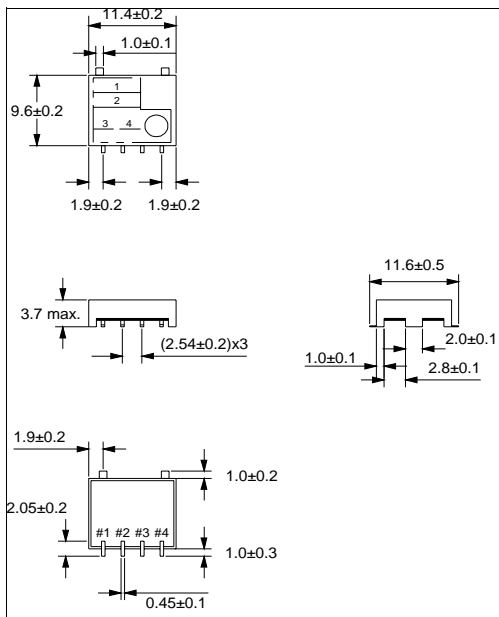
Enlarged View



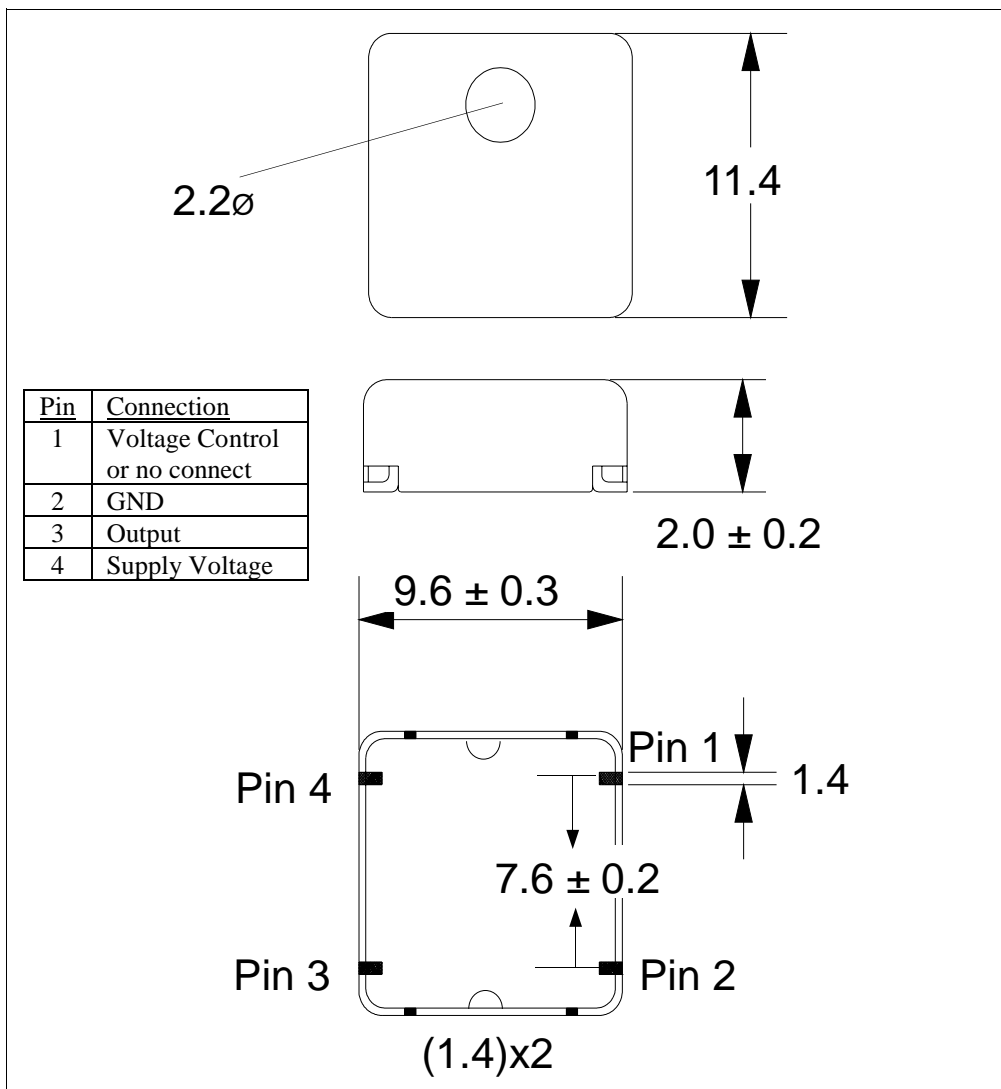
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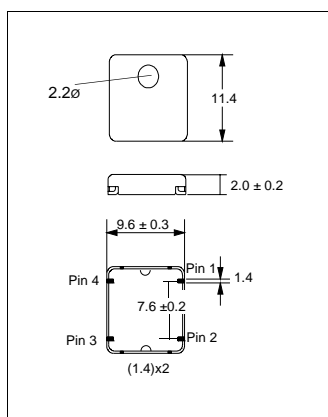
Enlarged View



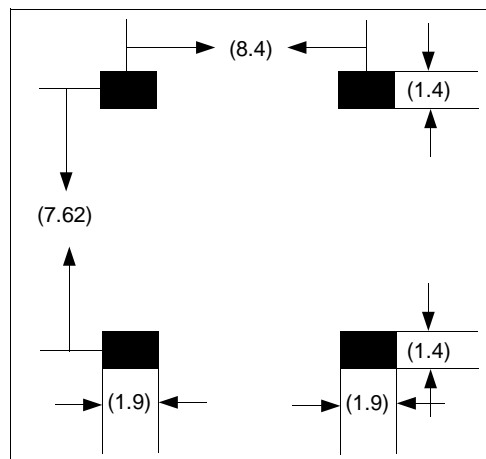
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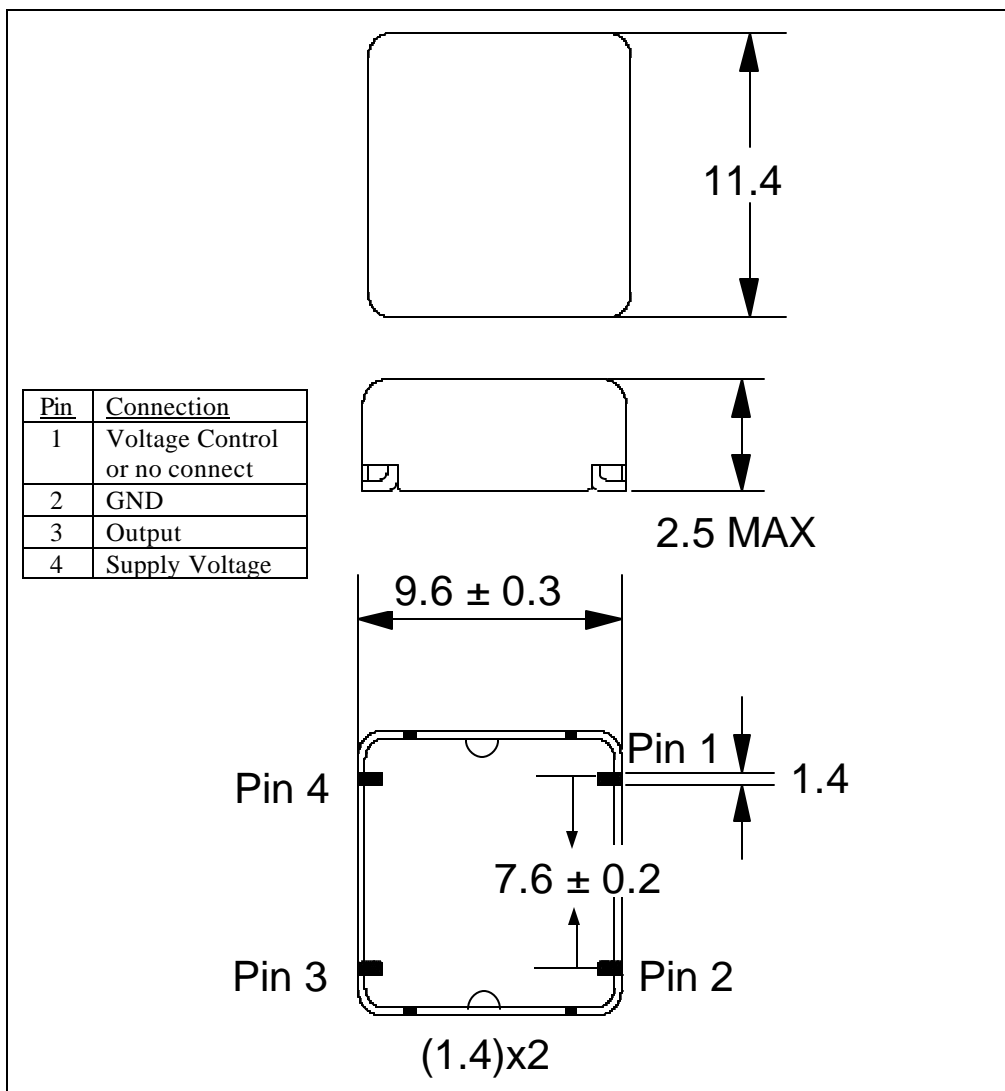
Enlarged View



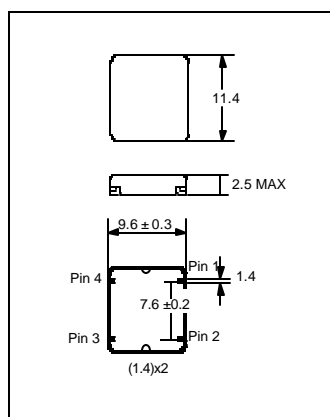
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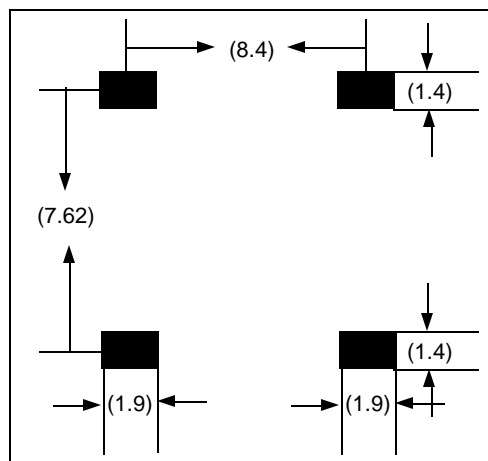
Dimensions in Millimeters (mm)



Enlarged View



Actual Size Shown Above  
1=1



Dimensions in Millimeters (mm)