TF SERIES

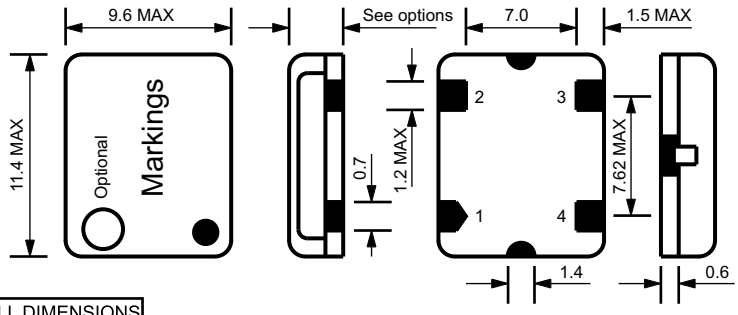
- 5.0, 3.3 or 3.0 Volt TXCO
- HCMOS, Sinewave, Clipped Sine
- 9.600MHz to 50.000MHz
- Stability Down to ±1ppm

ASCEND FREQUENCY DEVICES

Electrical Specifications

Frequency Range:	H Option = HCMOS Output	9.600MHz to 50.000MHz
	C Option = Clipped Sine Output	9.600MHz to 50.000MHz
	Z Option = Sinewave Output	9.600MHz to 50.000MHz
Initial Calibration Tolerance	at 25°C ±2°C	<±1.0ppm w/trimmer, ±2.0ppm w/o trimmer
Frequency Stability:	vs. Aging = ±1ppm per year max.	±1.0ppm to ±5.0ppm
	vs. Voltage (with a 5% change) = ±0.3ppm	
	vs. Load (with a 10% change) = ±0.3ppm	
Output Load;	H Option or C Option	10K Ohms // 15pF
	Z Option	50 Ohms
Supply Current:	H Option	35mA Maximum
	C Option	3mA Maximum
	Z Option	5mA Maximum
Output:	H Option	Logic "1" Level = 0.9Vdd Minimum; Logic "0" Level = 0.1Vdd Maximum
	C Option	1.0V p-p Minimum
	Z Option	7dBm Minimum
Operating Temperature Range:	-	0°C to +50°C to -40°C to +85°C
Storage Temperature Range:	-	-40°C to +85°C
Supply Voltage (Vdd):	-	3.0Vdc ±5% / 3.3Vdc ±5% / 5.0Vdc ±5%
Internal Trim (Top of Can)	-	±3ppm Minimum
Control Voltage:	Vdd = 3.0V	1.50Vdc ±1.0Vdc (Positive Slope)
	Vdd = 3.3V	1.65Vdc ±1.5Vdc (Positive Slope)
	Vdd = 5.0V	2.5Vdc ±2.0Vdc (Positive Slope)
Pad 1 Connection:	Blank Option	No Connect (Blank Option); ±10ppm Minimum (V Option)

Mechanical Dimensions



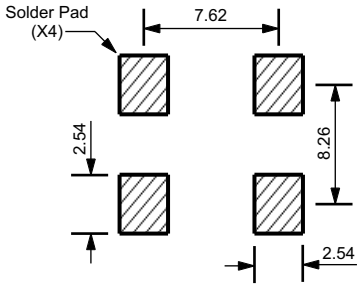
ALL DIMENSIONS IN MILLIMETERS

Pin	FUNCTION
1	N/C or Control Voltage
2	Case Ground
3	Output
4	Supply Voltage

MARKING

Line 1: Ascend
Line 2: XX.XXXR
("R" Denotes RoHS Compliance)
Line 3: XXXXXX (Date Code)

Solder Pad Layout



Part Numbering Guide

TF C 3 H 15 F V 3 - 20.000M

Series
TF = 2.5mm Height
T2F = 5.0mm Height

Package Option
C = C Series (with trimmer)
J = J Series (without trimmer)

Supply Voltage
3 = 3.0V 33 = 3.3V
5 = 5.0V

Output Type
H = HCMOS, **C** = Clipped Sinewave, or **Z** = Sinewave

Frequency Stability*
10 = ±1.0ppm
15 = ±1.5ppm
20 = ±2.0ppm
25 = ±2.5ppm
30 = ±3.0ppm
35 = ±3.5ppm
50 = ±5.0ppm

* Check with factory for additional Stability vs. Temperature options

Frequency

Output Power (Sine Wave Only)
1 = ±1dBm 4 = ±4dBm 7 = ±7dBm
2 = ±2dBm 5 = ±5dBm
3 = ±3dBm 6 = ±6dBm

Pin 1 Connection
Blank = No Connect
V = Voltage Control

Operating Temperature Range
A = 0°C to +50°C
B = -10°C to +60°C
C = -20°C to +70°C
D = -30°C to +70°C
E = -30°C to +75°C
F = -40°C to +85°C
G = 0°C to +70°C

(Rev.C / 6-26-08)

Specifications subject to change without notice

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