T3A SERIES

- Typical 5mm x 7mm Ceramic SMD (RoHS Compliant)
- High Precision TCXO (VC Option)
- 3.3 Volt
- HCMOS Output

ASCEND FREQUENCY DEVICES

Electrical Specifications

Frequency Range:	MHz	5.000 - 26.000 (Contact Factory for list of available frequencies)
Frequency Stability:	Vs. Operating Temp Range	See ordering options below (Vdd: 3.3Vdc, Vc: 1.65Vdc)
	Vs. Frequency Tolerance	±1.0ppm Maximum (25°C ±2°C, Vdd: 3.3Vdc, Vc: 1.65Vdc)
	Vs. Input Voltage (±5%)	±0.3ppm Maximum
	Vs. Load (±10%)	±0.3ppm Maximum
	Vs. Aging (25°C)	±1.0ppm Per Year Maximum
Operating Temperature Range:	-	See ordering options below
Storage Temperature Range:	-	-55°C to +125°C
Supply Voltage (Vdd):	-	3.3Vdc ±5%
Supply Current:	-	6mA Maximum
Output Level	Output High (Logic "1")	90% Vdd Minimum
	Output Low (Logic "0")	10% Vdd Maximum
	Duty	45/55%
Load Drive Capability	-	15pF HCMOS Load
Input Impedance:	-	100kOhms Minimum
External Trim (Vc Option)	1.65Vdc ±1.65Vdc	±5.0ppm Minimum (Positive Transfer Characteristic)
Rise/Fall Time	-	5nSec
Phase Noise:	at 12.800MHz	-90dBc/Hz at 10Hz
		-110dBc/Hz at 100Hz
		-135dBc/Hz at 1KHz
		-145dBc/Hz at 10KHz
		-150dBc/Hz at 100KHz
RMS Phase Jitter	12KHz - 20MHz	1pSec Maximum
Start-up Time:	-	8mSec Maximum
Tri-state Input Voltage (VIH and VIL)	No Connect	Enables Output
	+0.9Vdd Minimum	Enables Output
	+0.1Vdd Maximum	Disables Output (High Impedance)
Linearity	-	5% Maximum

Part Numbering Guide

T3A 3 H 02 N C - 12.800M TR

Series
5 x7 Ceramic SMD 10 Pads TCXO (RoHS Compliant)

Supply Voltage
3 = 3.3V

Output Type
H =HCMOS (15pf)

Frequency Stability
01 = ±0.5ppm
02 = ±1.0ppm
03 = ±1.5ppm
04 = ±2.0ppm
05 = ±2.5ppm

Tape and Reel

Frequency

Operating Temperature Range
A = 0°C to +55°C
B = -10°C to +60°C
C = -20°C to +70°C
D = -40°C to +85°C

External Trim
N = No Connect (Pad 1)
V = Voltage Control

(Rev. A / 06-26-07)

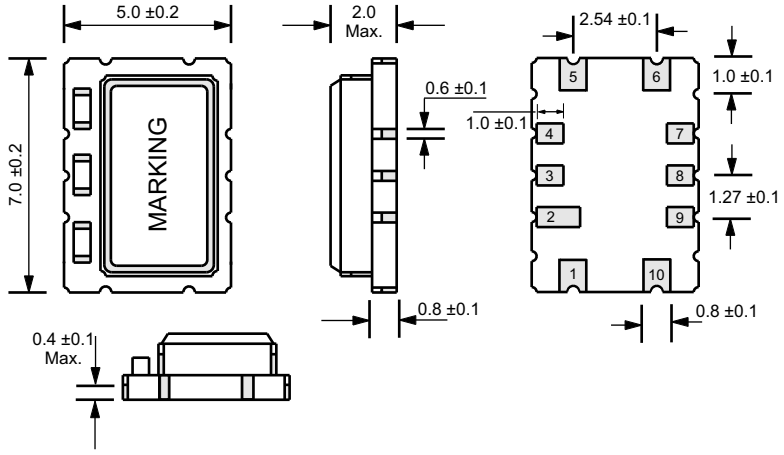
Specifications subject to change without notice

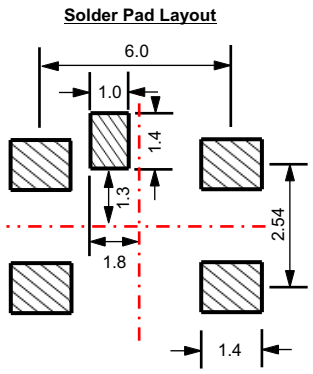
T3A SERIES

- Typical 5mm x 7mm Ceramic SMD (RoHS Compliant)
- High Precision (-20°C to +70°C) ±0.28ppm
- 5.0 and 3.3 Volt
- CMOS and Clipped Sine wave Output

ASCEND FREQUENCY DEVICES

Mechanical Dimensions



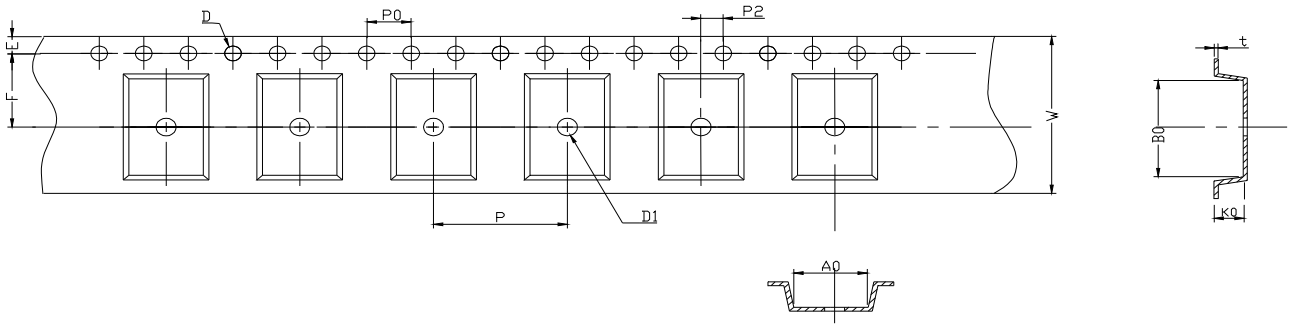


Pad	FUNCTION
1	N/C or Voltage Control
2	N/C
3	N/C
4	N/C
5	Ground
6	Output
7	N/C
8	N/C
9	Tri-State Control*
10	VDD

ALL DIMENSIONS IN MILLIMETERS

MARKING
Line 1: AXX.XXX
Line 2: XXXXXX (Date Code)

Tape Dimensions



A0	B0	D	D1	E	F	K0	P	P0	P2	t	W
5.56±0.1	8.18±0.1	ø1.50	ø1.50	1.75	7.50±0.1	2.16	8.0±0.1	4.00	2.00	0.32±0.015	16.0±0.2

Environmental / Mechanical

Parameter	Reference STD
Vibration	MIL-STD-883, Method 2007, Condition A
Mechanical Shock	MIL-STD-202, Method 213, Condition C
Solderability	MIL-STD-883, Method 2003
Resistance to Soldering Heat	MIL-STD-202, Method 210
Fine Leak	MIL-STD-883, Method 1014, Condition A
Gross Leak	MIL-STD-883, Method 1014, Condition C
Resistance to Solvents	MIL-STD-202, Method 215
Temperature Cycling	MIL-STD-883, Method 1010

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