



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# HCMOS OUTPUT SMD TCXO



3.2 x 2.5 x 1.0mm

**ASTX-H11**



**ESD Sensitive**



**RoHS/RoHS II compliant**

**Moisture Sensitivity Level (MSL)-1**

## FEATURES:

- HCMOS Output
- Compact and low in height
- Low current consumption; IR reflow possible
- Suitable for high-density SMT

## APPLICATIONS:

- Cellular and cordless phones
- Standard OSC for exact equipment
- Mobile communication equipment
- Portable radio equipment and music player

## STANDARD SPECIFICATIONS:

Parameters	Minimum	Typical	Maximum	Units	Notes
Frequency Range	2.500		55.000	MHz	
Standard Frequencies	5, 10, 12, 16, 20, 24, 32, 40, 44			MHz	
Operating Temperature	-30		+75	°C	
Storage Temperature:	-40		+125	°C	
Frequency Stability $\Delta f/f_0$ vs Tolerance (@+25°C)	-2.0		+2.0	ppm	1 hr after reflow
vs Temperature (ref. to +25°C)	-2.5		+2.5		See option (Table 1)
vs Supply Voltage Change (Vdd±5%)	-0.2		+0.2		
vs Load Change (ZL±10%)	-0.2		+0.2		
vs Aging (first year @+25°C)	-1.0		+1.0		
Supply Voltage (Vdd)	+2.97	+3.3	+3.63	V	See option
Supply Current (Icc)			4.0	mA	4~10MHz
			4.8		~20MHz
			5.5		~30MHz
			6.0		~40MHz
			7.0		~54MHz
Rise and Fall Time (Tr/Tf)			5	ns	10%-90%Vdd
Symmetry	45		55	%	@1/2 Vdd
Output Voltage	V <sub>OH</sub>	90%Vdd		V	
	V <sub>OL</sub>		10%Vdd		
Load			15	pF	
Waveform	HCMOS				
Phase Noise (Frequency dependant)		-130		dBc	@1kHz offset
		-158			@100kHz offset
Tri-state Function (Stand-by) :	"1" (VIH≥0.7 5*Vdd) or Open: Oscillation "0" (VIL<0.25*Vdd) : Hi Z			V	



3.2 x 2.5 x 1.0mm

ASTX-H11



RoHS/RoHS II compliant

## OPTIONS & PART IDENTIFICATION:

(Left blank if standard)

ASTX-H11- [ ] - [ ] MHz - [ ] - [ ]

Vdd (V)
Blank: 3.3V±10%
A: 2.8V±10%
B: 2.5V±10%

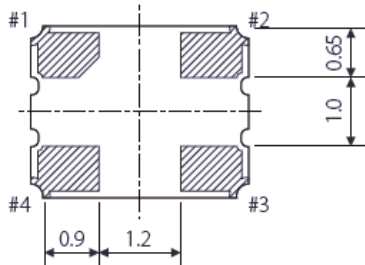
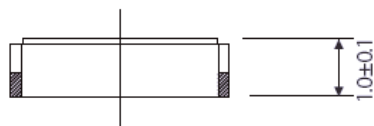
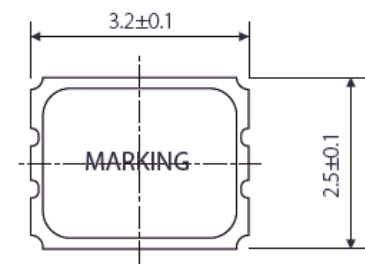
Frequency in MHz
Please specify the frequency in MHz. e.g. 19.200MHz

Packaging
Blank: Bulk
T: 1000pcs/reel

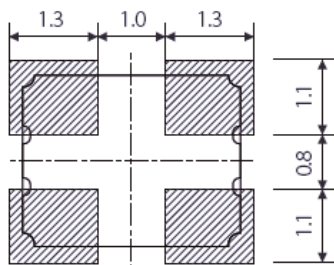
	±2.5ppm	±3.0ppm	±4ppm	±5ppm
0°C ~ +50°C	D25	D30	D40	D50
-10°C ~ +60°C	E25	E30	E40	E50
-0°C ~ +70°C	F25	F30	F40	F50
-20°C ~ +75°C	G25	G30	G40	G50
-30°C ~ +75°C	Blank(STD)	H30	H40	H50
-40°C ~ +85°C	I25	I30	I40	I50

Table 1

## OUTLINE DIMENSIONS:



### Recommended Land Pattern



Tri-state pin	Output
High or floating	Active
Low	Hi-impedance

Note: Recommend using an approximately 0.01µF bypass capacitor between Pin 2 and 4.

PIN	FUNCTION
1	Tri-state
2	GND
3	Output
4	Vdd

Dimensions: mm



ASTX-H11

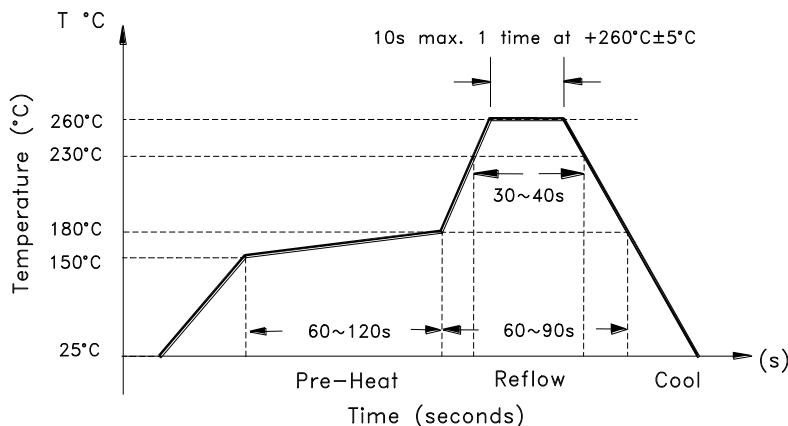
3.2 x 2.5 x 1.0mm

ASTX-H11



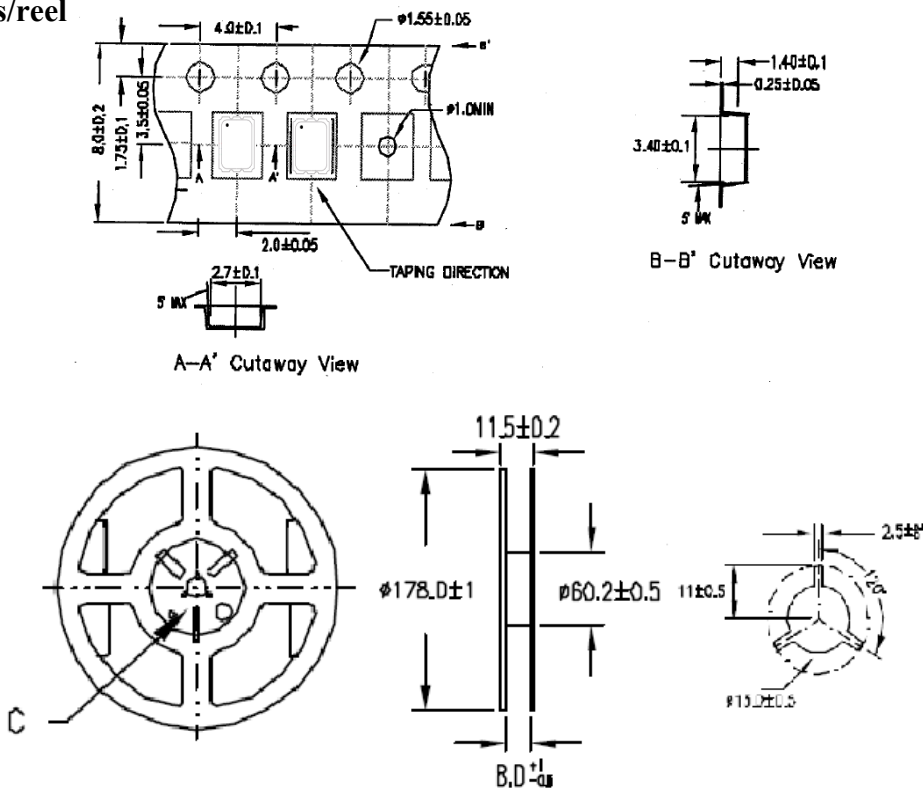
RoHS/RoHS II compliant

## REFLOW PROFILE:



## TAPE & REEL:

T: 1,000pcs/reel



Dimensions: mm

**ATTENTION:** Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS  
ISO 9001 : 2008  
CERTIFIED



2 Faraday, Suite# B | Irvine | CA 92618 Revised: 05.13.15  
Ph. 949.546.8000 | Fax. 949.546.8001  
Visit [www.abracon.com](http://www.abracon.com) for Terms and Conditions of Sale