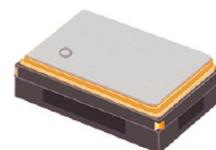


Programmable - High Performance SMD XO & VCXO (LVCMOS Output)



2.5 x 2.0 x 1.0 mm

ASG2-C



Moisture Sensitivity Level (MSL) – 1

FEATURES:

- +2.5V or +3.3V operation
- -40°C to +85°C standard operating temperature range
- Miniature size 2.5 x 2.0 x 1.0 mm Ceramic SMT Package
- Short lead time

APPLICATIONS:

- Networking
- SONET/SDH
- WiMax / WLAN
- Computing
- Phase Locked Loops
- Direct Digital Synthesis (DDS)
- DSL/ADSL
- Base Terminal Stations

STANDARD SPECIFICATIONS:

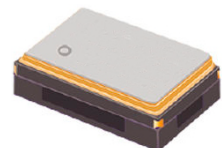
Parameters	Minimum	Typical	Maximum	Units	Notes	
Frequency Range	8		200	MHz		
Operating Temperature	-40		+85	°C		
Storage Temperature	-55		+125	°C		
Overall Frequency Stability	-50		+50	ppm	<i>See Note # 1</i>	
Initial Tolerance + Stability over operating temperature	-35.00		+35.00	ppm		
Supply Voltage (V _{dd})	V _{dd} = 3.3V	3.135	3.300	3.465	V	
	V _{dd} = 2.5V	2.375	2.500	2.625	V	
Input Current			40	mA	Frequency dependent	
Duty Cycle	48	50	52	%	@ 1/2V _{dd}	
Rise and Fall Time (Tr/Tf)			3	ns	90%/10%	
Output Load			15	pF	CMOS	
Output Voltage	VOH	V _{dd} * 0.90		V		
	VOL		V _{dd} * 0.10	V		
Enable/Disable Function	"1" (V _{IH} ≥ 0.7*V _{dd}) or Open: Oscillation "0" (V _{IL} < 0.3*V _{dd}) : High Z					
Control Voltage Range	0		V _{dd}	V	For VCXO Only	
Absolute Pull Range	±35			ppm	For VCXO Only	
Control Port Bandwidth	10			kHz	For VCXO Only	
Linearity			15	%	For VCXO Only	
Slope	Positive				For VCXO Only	
Phase jitter RMS (12kHz to 20MHz offset)		1.0	1.8	ps	<i>See Note #2</i>	

Note #1: Inclusive of initial tolerance at 25°C±3°C, operating temperature range, input voltage variation, load variation & 15 years aging at 25°C.

Note #2: The rms jitter integrated over 12kHz to 20MHz Bandwidth is dependent on the carrier and whether or not the final frequency is achieved without engaging the Fractional Mode



Programmable - High Performance SMD XO & VCXO (LVCMOS Output)



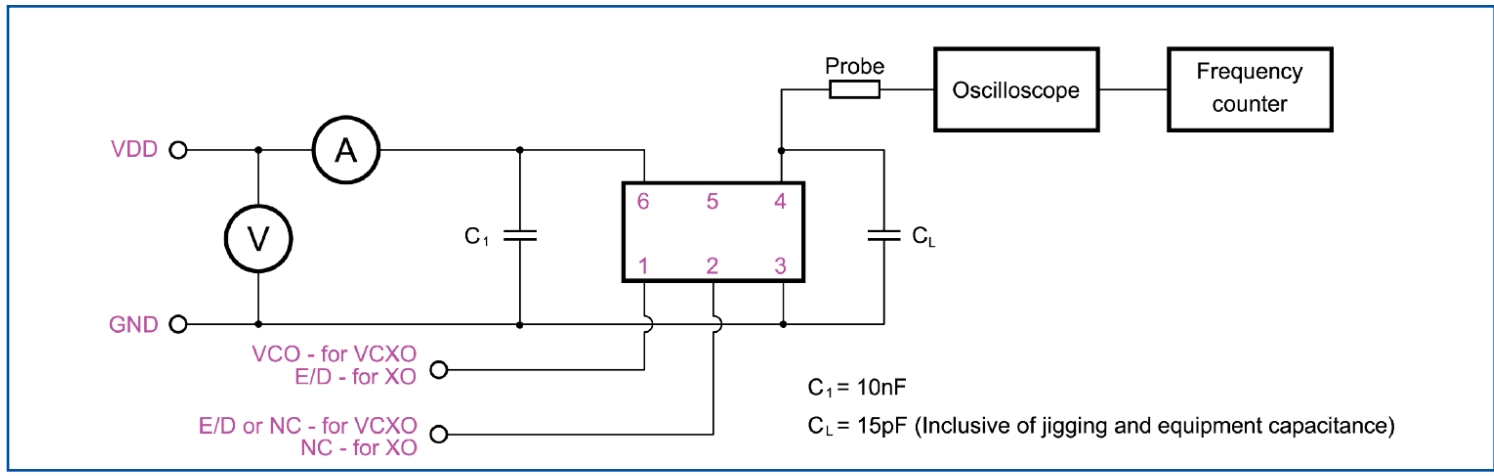
2.5 x 2.0 x 1.0 mm

ASG2-C

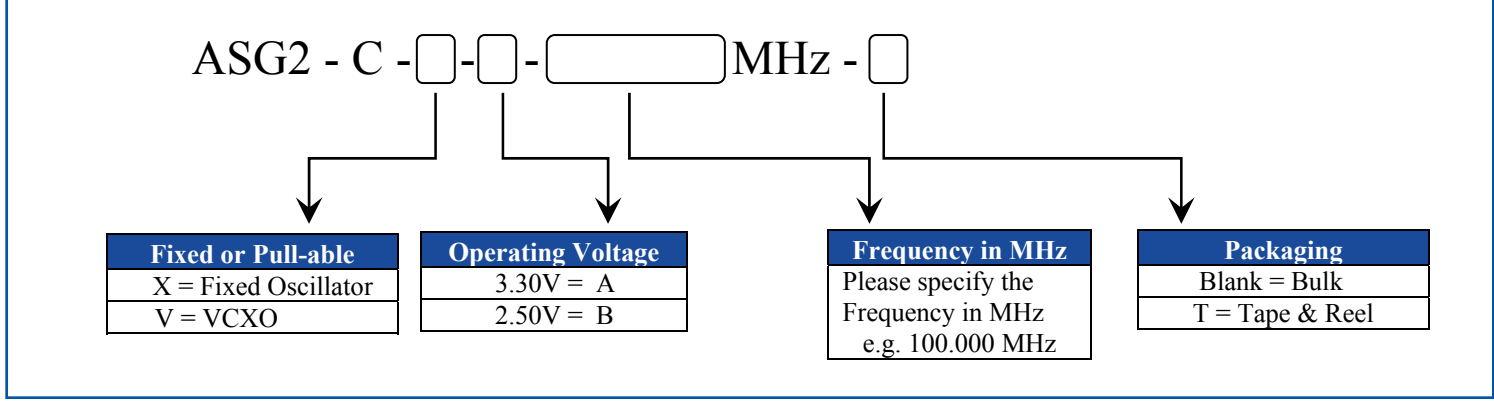
ESD Sensitive

RoHS / RoHS II Compliant

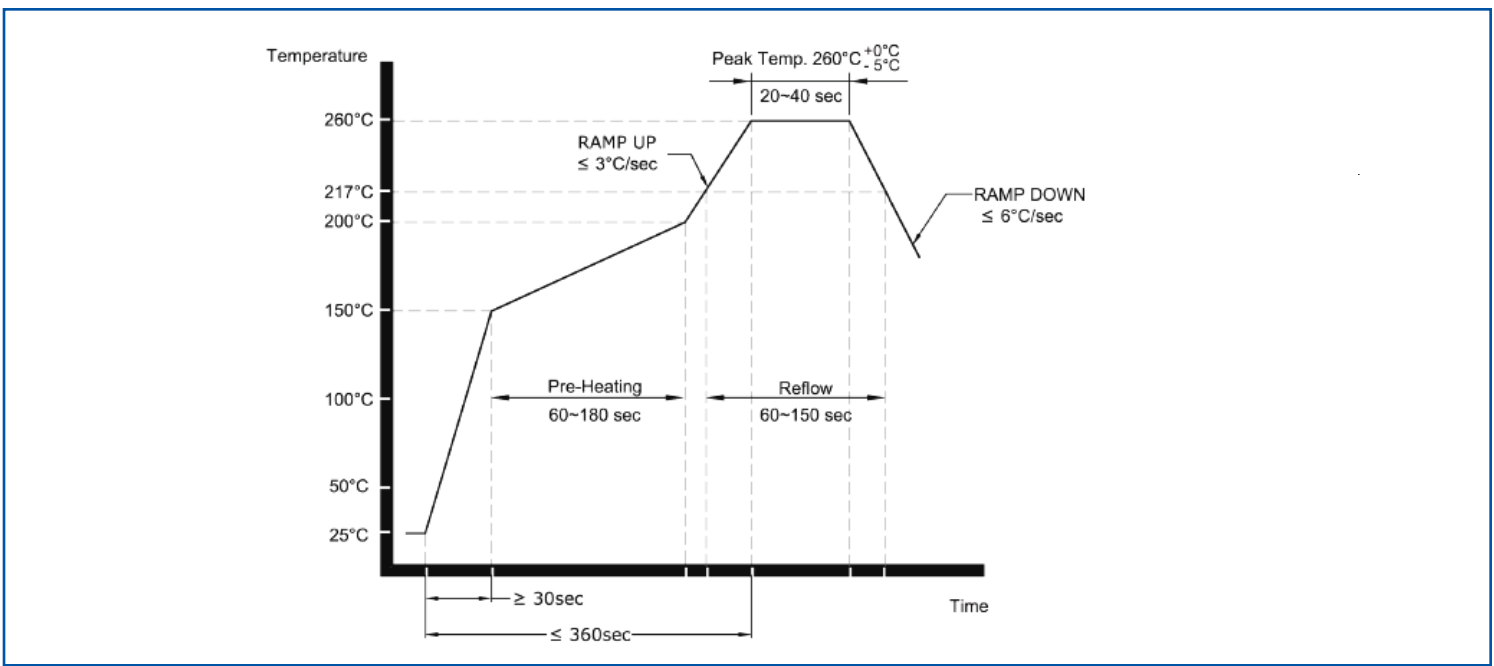
TEST CIRCUIT



OPTIONS & PART IDENTIFICATION:



RECOMMENDED REFLOW PROFILE



ABRACON IS
ISO9001:2008
CERTIFIED

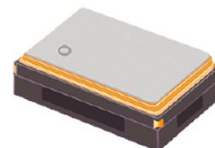


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Revised: 07.01.14

Programmable - High Performance SMD XO & VCXO (LVCMOS Output)



2.5 x 2.0 x 1.0 mm

ASG2-C

ESD Sensitive

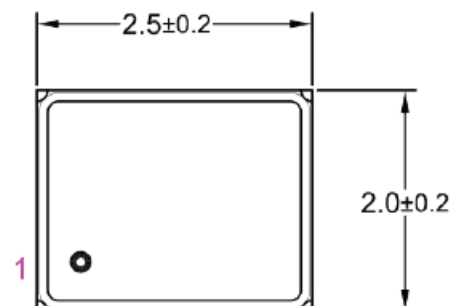
RoHS / RoHS II Compliant

OUTLINE DIMENSION:

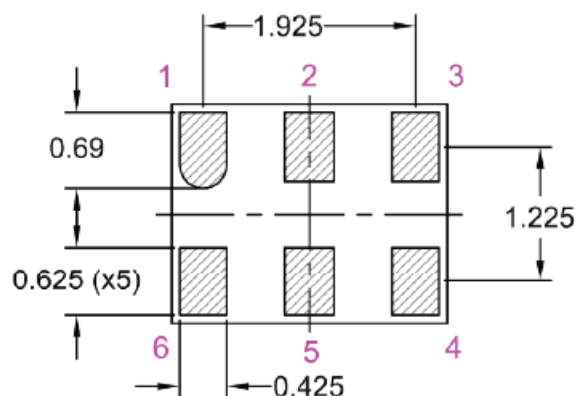
Pin #	Pin Description For VCXO configuration
1	Voltage Control for VCXO
2	Output Enable (OE) <i>or</i> No Connect (N/C)
3	GND
4	RF Output
5	No Connect (N/C)
6	Vdd

Pin #	Pin Description For XO configuration
1	Output Enable (OE)
2	No Connect (N/C) for XO
3	GND
4	RF Output
5	No Connect (N/C)
6	Vdd

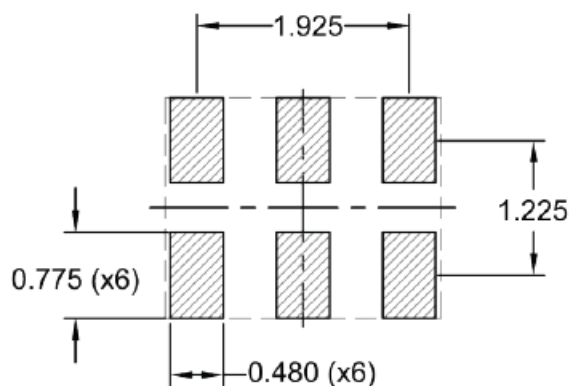
Top View



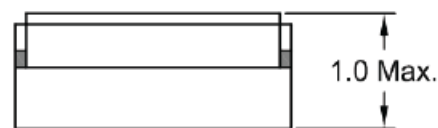
Bottom View



Recommended Land Pattern



Side View



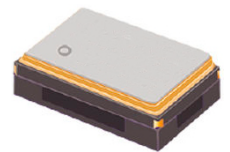
Dimensions: mm

Programmable - High Performance SMD XO & VCXO (LVCMOS Output)

ASG2-C

 **ESD Sensitive**

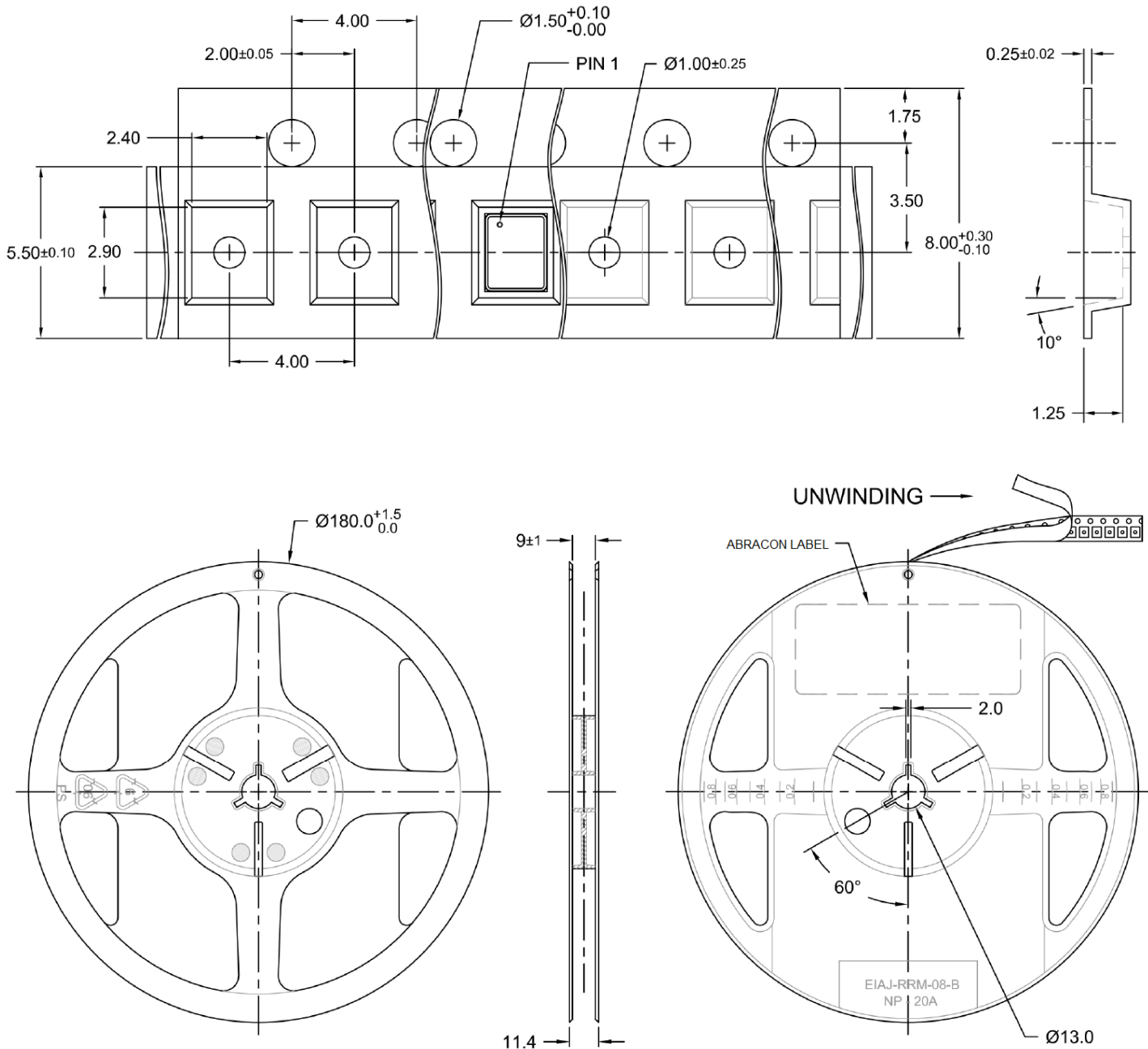
 **RoHS / RoHS II Compliant**



2.5 x 2.0 x 1.0 mm

TAPE & REEL:

T= Tape and reel (3,000pcs/reel)



Dimensions: mm

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Revised: 07.01.14