# HCMOS/ TTL COMPATIBLE, J LEADED, PLASTIC MOLDED SMD CRYSTAL CLOCK OSCILLATOR

**ASM SERIES** 

#### Pb in high temperature solder (exempt per RoHS 2002/95/EC Annex (7)).

14.0 x 8.95 x 4.7 mm

The 14x9.8mm plastic package oscillator is not recommended for new designs. Please consider our reduced size ceramic or plastic molded SMD packages. Recommended series include ASL, ASV, ASVM, ASFL, ASFLM, ASE, ASEM . For 5.0V please use ASL series. Product Life Cycle: Declining, Planned EOL/Obsolescence pending 12/31/2011

#### **FEATURES:** >

- Industry standard J-Leaded terminals.
- · Plastic molded SMD
- Tristate Enable/ Disable.
- ► APPLICATIONS:
  - Wide range of applications in dialing communication equipment, AV / OA equipment, Measuring equipment.

RoHS

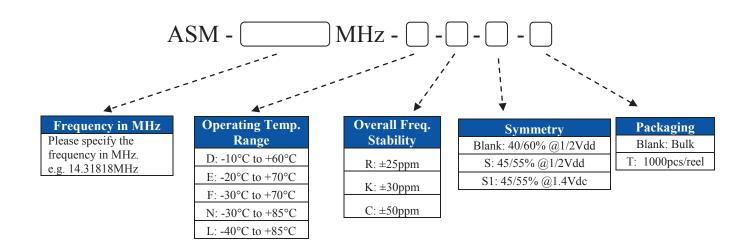
Compliant

• HCMOS and TTL compatible • Extended temperature -40°C to 85°C option • Suitable for RoHS compliant reflow

### **STANDARD SPECIFICATIONS:**

Parameters		Minimum	Typical	Maximum	Units	Notes
Frequency Range:		1.0		125.0	MHz	
Operating Temperature:		0		+70	°C	See options
Storage Temperature:		-55		+125	°C	Â
Overall Frequency Stability:		-100		+100	ppm	See options
Supply Voltage (Vdd):		4.5	5.0	5.5	V	
Supply Current (I <sub>dd</sub> ):				20		F ≤ 20 MHz
				40	mA	F ≤ 70 MHz
				80		F ≤ 125 MHz
Output Load				50	pF	
				10	TTL	
Output Voltage:	V <sub>OH</sub>	0.9*Vdd			V	
	V <sub>OL</sub>			0.1*Vdd	V	
Tri-state function :		"1" (VIH≥ 2.2V) or Open: Oscillation "0" (VIL<0.8V) : Hi Z				
Aging:		-5.0		+5.0	ppm	@+25°C First year
Symmetry:		40		60	%	@1/2Vdd CMOS(See options)
Start-up Time :				10	ms	
Rise/Fall Time (Tr/Tf):				10	ns	
Period jitter one sigma :				25	ps	

## **OPTIONS & PART IDENTIFICATION:**







**Revised: 05.17.11** Visit www.abracon.com for Terms & Conditions of Sale 30332 Esperanza, Rancho Santa Margarita, California 92688 tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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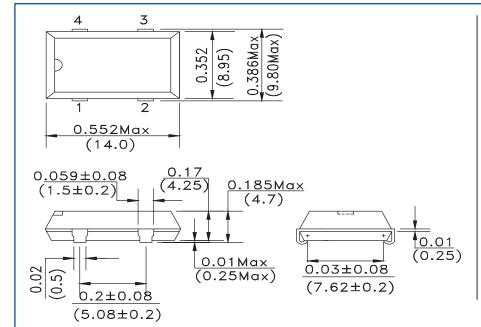
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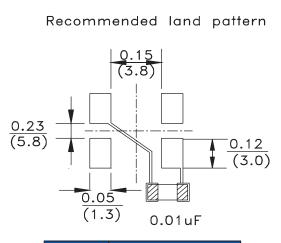


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**ASM SERIES** 





RoHS

Compliant

PIN	FUNCTION
1	Tristate
2	GND/Case
3	Output
4	Vdd

Note: Recommend using an approximately 0.01uF bypass capacitor between pin 2 and 4.

Dimension : Inch (mm)

#### **PACKAGING:**

**REFLOW PROFILE:**  $\triangleright$ Dimension : mm FEEDING (PULL) DIRECTION 2.0±0.06 1.75±0.1 4.0±0.1  $0.4 \pm 0.05$ ф 1.5±0. PIN1 Т °C 24±0.3 10s max. 1 time at +260°C±5°C 00 260°C 230°C Temperature ø1.0 30~40s 10.1±0.1 5.0±0.1  $12 \pm 0$ 180°C 150°C 25.5±0.5 Ti 2.0±0.2 ø13.0±0.5 60~90s 60~120s 25°C (s) Cool Pre-Heat Reflow  $2 \pm 0.5$ ø330± Time (seconds) ø21±0.8 20

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