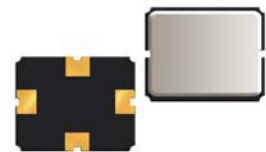


# SMD ONE PORT 318.00 MHz SAW RESONATOR

ASR318S2



RoHS  
Compliant



5 x 3.5 x 1.5mm

## STANDARD SPECIFICATIONS:

CHARACTERISTICS		UNIT	MIN.	TYP.	MAX.
Center Frequency Fo		MHz	317.925	318.000	318.075
Tolerance from Fo		KHz		±75	
Insertion Loss		dB	-	1.2	1.8
Quality Factor	Unloaded	-		14,550	
	50Ω loaded			1,900	
Temperature Stability	Turnover Temperature	°C	25	40	55
	Turnover Frequency	KHz		Fc	
	Freq. Temp. Coefficient	ppm/°C <sup>2</sup>		0.032	
Frequency Aging		ppm/year		±10	
DC Insulation Resistance		MΩ	1.0		
RF Equivalent RLC Model	Motional Resistance R <sub>1</sub>	Ω		15	23
	Motional Inductance L <sub>1</sub>	μH		109.4119	
	Motional Capacitance C <sub>1</sub>	fF		2.2917	
	Shunt Capacitance C <sub>0</sub>	pF	2.4	2.7	3.0
Operating temp.		°C	-40°C to +85°C		
Storage temp.		°C	-40°C to +85°C		
Max. Rating	DC voltage	V	±0		
RF Power Dissipation		dBm	10		

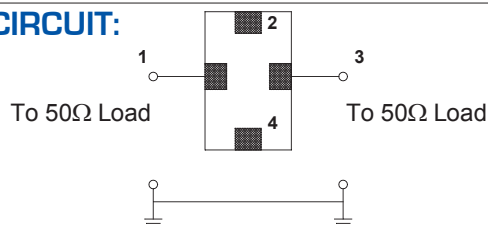
Electrostatic Sensitive Device. Handle with precaution.

## MARKING:

- ASR318 ZYX  
(Z for month from A to L;  
Y for year, i.e. 4 for 2004,  
X: Traceability code)

PIN NO.	CONNECTIONS
1	Input/Output
3	Output/Input
2 & 4	Case Ground

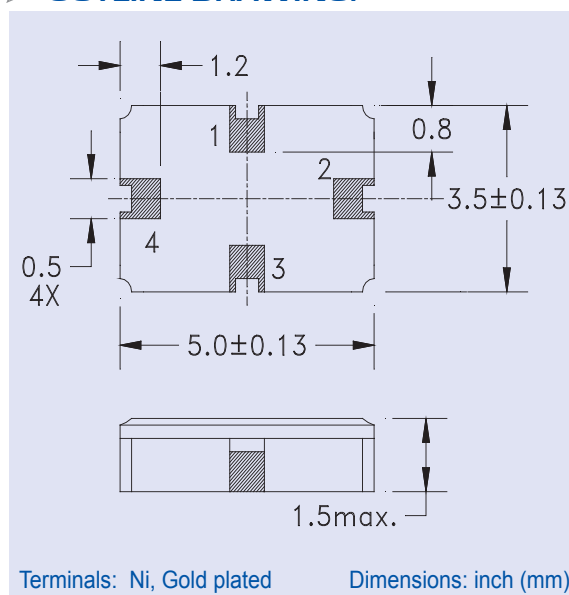
## TEST CIRCUIT:



## NOTES:

- 1) Frequency aging is specified at 65°C or less.
- 2) The center frequency Fc, is the frequency of minimum IL with the resonator in the specified test fixture in a 50Ω test system with VSWR ≤ 1.2.
- 3) Unless otherwise specified, case temperature is 25°C ± 2°C.
- 4) The design model values are for reference only. The capacitance C0 is the measured static capacitance between either pin 1 and ground or pin 3 to ground.

## OUTLINE DRAWING:



Terminals: Ni, Gold plated

Dimensions: inch (mm)

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ABRACON IS  
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