

# SMD ONE PORT 303.825 MHz SAW RESONATOR

ASR303.825E

APPLICATION: Automotive Electronics/Remote Control



5 x 5 x 1.5mm

## STANDARD SPECIFICATIONS:

CHARACTERISTICS		UNIT	MIN.	TYP.	MAX.
Center Frequency Fo		MHz	303.75	303.825	303.9
Tolerance from Fo		KHz		±75	
Insertion Loss		dB	-	1.3	2.5
Quality Factor	Unloaded	-		12,000	
	50Ω loaded			2,000	
Temperature Stability	Turnover Temperature	°C		39.0	
	Turnover Frequency	KHz		Fo	
	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		12	19
	Motional Inductance L <sub>1</sub>	μH		94.0	
	Motional Capacitance C <sub>1</sub>	fF		2.9	
	Shunt Capacitance C <sub>0</sub>	pF	2.7	3.0	3.3
Operating temp.		°C	-40°C to +85°C		
Storage temp.		°C	-45°C to +85°C		
Max. Rating	DC voltage	V	±10		
RF Power Dissipation		dBm	0		

Data measured with: Source Impedance: Z<sub>s</sub>=50Ω, Load Impedance: Z<sub>L</sub>=50Ω, T<sub>A</sub>=25°C

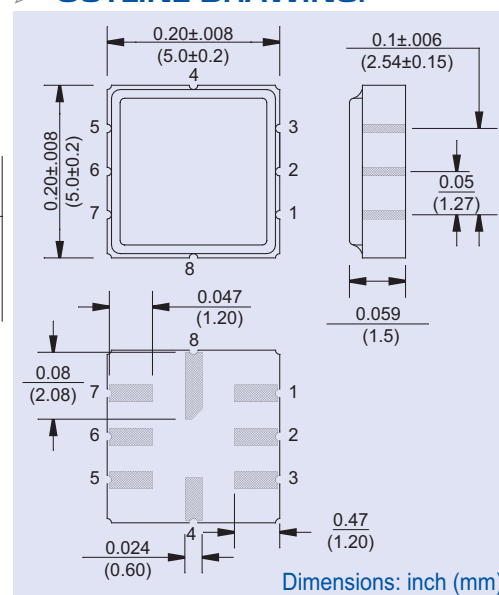
Electrostatic Sensitive Device. Handle with precaution.

## MARKING:

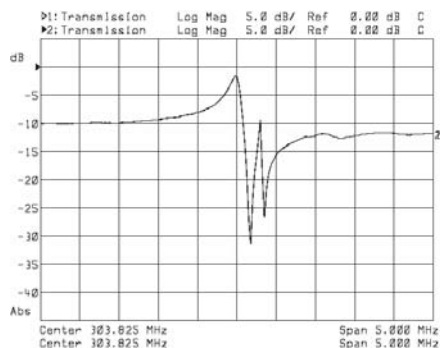
- 303.82 (303.825 Frequency in MHz)
- AR ZYX (ZY: Date code Z for month from A to L; Y for year, i.e. 4 for 2004 X: Traceability code)

PIN NO.	CONNECTIONS
1	Input GND
2	Input
5	Output GND
6	Output
3,7	To be GNDed
4,8	Case GND

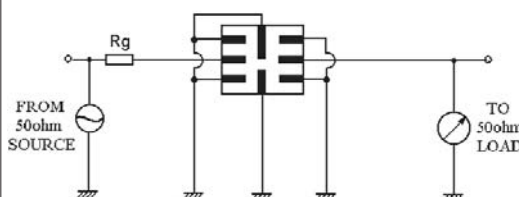
## OUTLINE DRAWING:



## FREQUENCY RESPONSE:



## TEST CIRCUIT:



ABRACON IS  
ISO 9001 / QS 9000  
CERTIFIED



30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com