

SMD ONE PORT 303.825 MHz SAW RESONATOR

ASR303.825E



RoHS
Compliant



5 x 5 x 1.5mm

STANDARD SPECIFICATIONS:

CHARACTERISTICS		UNIT	MIN.	TYP.	MAX.
Center Frequency F_0		MHz	303.75	303.825	303.9
Tolerance from F_0		KHz		± 75	
Insertion Loss		dB	-	1.3	2.5
Quality Factor	Unloaded	-		12,000	
	50 Ω loaded			2,000	
Temperature Stability	Turnover Temperature	$^{\circ}\text{C}$		39.0	
	Turnover Frequency	KHz		F_0	
	Freq. Temp. Coefficient	ppm/ $^{\circ}\text{C}^2$		0.032	
Frequency Aging		ppm/year		$< \pm 10$	
DC Insulation Resistance		M Ω	1.0		
RF Equivalent RLC Model	Motional Resistance R_1	Ω		12	19
	Motional Inductance L_1	μH		94.0	
	Motional Capacitance C_1	fF		2.9	
	Shunt Capacitance C_0	pF	2.7	3.0	3.3
Operating temp.		$^{\circ}\text{C}$	-40°C to $+85^{\circ}\text{C}$		
Storage temp.		$^{\circ}\text{C}$	-45°C to $+85^{\circ}\text{C}$		
Max. Rating	DC voltage	V	± 10		
RF Power Dissipation		dBm	0		

Data measured with: Source Impedance: $Z_s=50\Omega$, Load Impedance: $Z_L=50\Omega$, $T_A=25^{\circ}\text{C}$

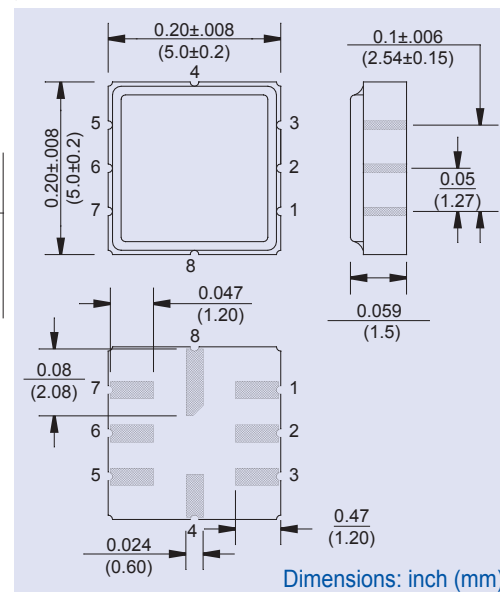
Electrostatic Sensitive Device. Handle with precaution.

MARKING:

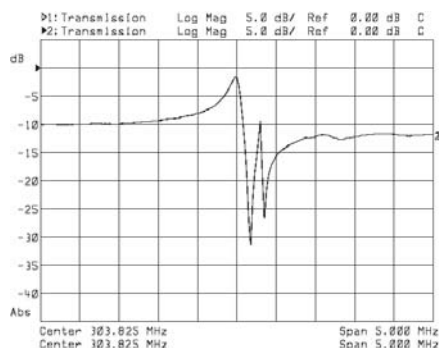
- 303.82 (303.825 Frequency in MHz)
- AR ZYX (ZY: Date code Z for month from A to L; Y for year, i.e. 4 for 2004
X: Traceability code)

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

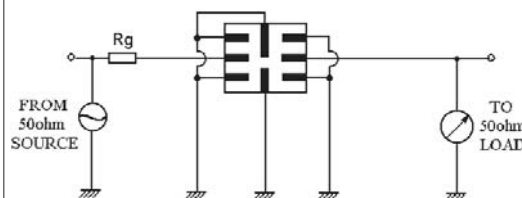
OUTLINE DRAWING:



FREQUENCY RESPONSE:



TEST CIRCUIT:



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