

SMD ONE PORT 310.0 MHz SAW RESONATOR

ASR310S2-01



RoHS
Compliant



5 x 3.5 x 1.5mm

STANDARD SPECIFICATIONS:

CHARACTERISTICS		UNIT	MIN.	TYP.	MAX.
Center Frequency F_0		MHz	309.925	310.000	310.075
Tolerance from F_0		KHz		± 75	
Insertion Loss		dB	-	1.3	2.5
Quality Factor	Unloaded	-		11,800	
	50 Ω loaded			3,500	
Temperature Stability	Turnover Temperature	$^{\circ}\text{C}$	37	52	67
	Turnover Frequency	KHz		F_c	
	Freq. Temp. Coefficient	ppm/ $^{\circ}\text{C}^2$		0.037	
Frequency Aging		ppm/year		± 10	
DC Insulation Resistance		M Ω	1.0		
RF Equivalent RLC Model	Motional Resistance R_1	Ω		43	78
	Motional Inductance L_1	μH		260.2	
	Motional Capacitance C_1	fF		2.2	
	Shunt Capacitance C_0	pF	2.1	2.4	2.7
Operating temp.		$^{\circ}\text{C}$	-40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$		
Storage temp.		$^{\circ}\text{C}$	-45 $^{\circ}\text{C}$ 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: $Z_L=50\Omega$, $T_A=25^{\circ}\text{C}$

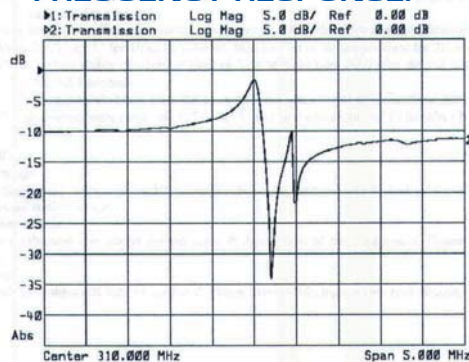
Electrostatic Sensitive Device. Handle with precaution.

MARKING:

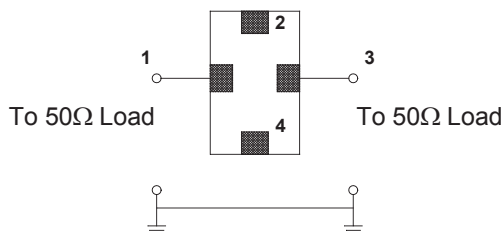
- 310-01 (310.0 Frequency in MHz)
- ASR ZYX (ZY: Date code Z for month from A to L; Y for year, i.e. 4 for 2004
X: Traceability code)

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

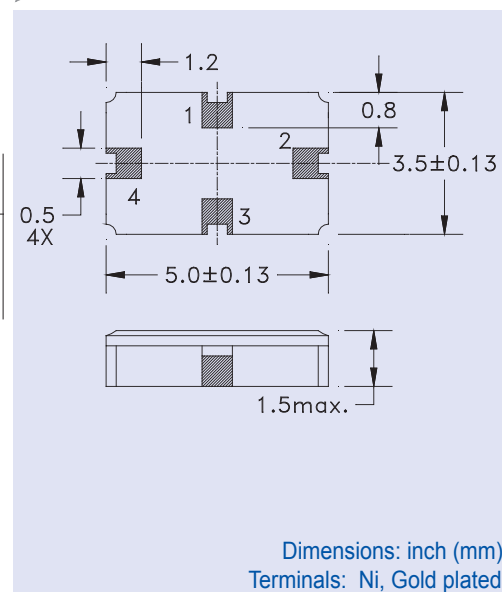
FREQUENCY RESPONSE:



TEST CIRCUIT:



OUTLINE DRAWING:



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