

# SMD ONE PORT 310.00E MHz SAW RESONATOR

ASR310E

APPLICATION: Automotive Electronics/Remote Control



5 x 5 x 1.35mm

## STANDARD SPECIFICATIONS:

CHARACTERISTICS		UNIT	MIN.	TYP.	MAX.
Center Frequency Fo		MHz	309.925	310.000	310.075
Tolerance from Fo		KHz		±75	
Insertion Loss		dB	-	1.3	1.8
Quality Factor	Unloaded	-		12,325	
	50Ω loaded			1,700	
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		16	23
	Motional Inductance L <sub>1</sub>	μH		101.2944	
	Motional Capacitance C <sub>1</sub>	fF		2.6048	
	Shunt Capacitance C <sub>0</sub>	pF	2.60	2.90	3.20
Operating temp.		°C	-25°C to +85°C		
Storage temp.		°C	-40°C to +85°C		
Max. Rating	DC voltage	V	±10		
RF Power Dissipation		dBm	10		

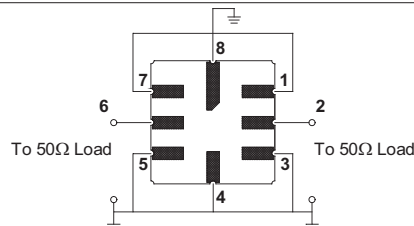
Electrostatic Sensitive Device. Handle with precaution.

## MARKING:

- ASR310 ZYX  
 (Z for month from A to L;  
 Y for year, i.e. 4 for 2004,  
 X: Traceability code)

PIN NO.	CONNECTIONS
2	Input/Output
6	Output/Input
4 & 8	Case GND
1,3,5,7	N/C

## 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 two terminals.

## OUTLINE DRAWING:

