

SMD ONE PORT 318.0 MHz SAW RESONATOR

ASR318E

APPLICATION: Automotive Electronics/Remote Control



5 x 5 x 1.35mm

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	-	1.5	2.2
Quality Factor	Unloaded	-		13,780	
	50Ω loaded			2,200	
Temperature Stability	Turnover Temperature	°C	25	40	55
	Turnover Frequency	KHz		Fc	
	Freq. Temp. Coefficient	ppm/°C ²		0.032	
Frequency Aging		ppm/year		±10	
DC Insulation Resistance		MΩ	1.0		
RF Equivalent RLC Model	Motional Resistance R ₁	Ω		19	29
	Motional Inductance L ₁	μH		131.0940	
	Motional Capacitance C ₁	fF		1.9127	
	Shunt Capacitance C ₀	pF	2.20	2.45	2.70
Operating temp.		°C	-40°C to +85°C		
Storage temp.		°C	-40°C to +85°C		
Max. Rating	DC voltage	V	±10		
RF Power Dissipation		dBm	0		

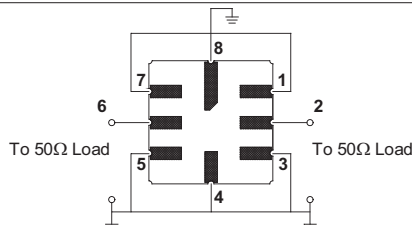
Electrostatic Sensitive Device. Handle with precaution.

MARKING:

- 318R AZYX
 (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:

