

# SMD ONE PORT 418.0 MHz SAW RESONATOR

ASR418A

**APPLICATION:** Automotive Electronics/Remote Control



9.3 x 3.4mm

## STANDARD SPECIFICATIONS:

CHARACTERISTICS		UNIT	MIN.	TYP.	MAX.
Center Frequency Fo		MHz	417.925	418.0	415.075
Tolerance from Fo		KHz		±75	
Insertion Loss		dB	-	1.5	2.0
Quality Factor	Unloaded	-		12,500	
	50Ω loaded			2,000	
Temperature Stability	Turnover Temperature	°C	25	40	55
	Turnover Frequency	KHz		Fc	
	Freq. Temp. Coefficient	ppm/°C <sup>2</sup>		0.037	
Frequency Aging		ppm/year		±10	
DC Insulation Resistance		MΩ	1.0		
RF Equivalent RLC Model	Motional Resistance R <sub>1</sub>	Ω		19	29
	Motional Inductance L <sub>1</sub>	μH		90.665	
	Motional Capacitance C <sub>1</sub>	fF		1.6006	
	Shunt Capacitance C <sub>0</sub>	pF		1.8	
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	10		

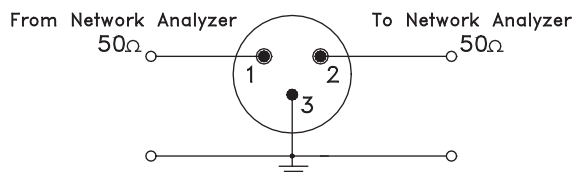
Electrostatic Sensitive Device. Handle with precaution.

## MARKING:

- ASR418.0

PIN NO.	CONNECTIONS
1	Input/Output
2	Output/Input
3	Case GND

## 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 either pin 1 and ground or pin 2 to ground.

## OUTLINE DRAWING:

