

# LEADED, TO-39 PACKAGE SAW RESONATORS

ASR310



**RoHS**  
Compliant



9.8 x 9.8 x 3.6mm

## FEATURES:

- One-port SAW resonator 310MHz. See page 87- 88 for additional frequencies.
- Wide operating temperature range.

## APPLICATIONS:

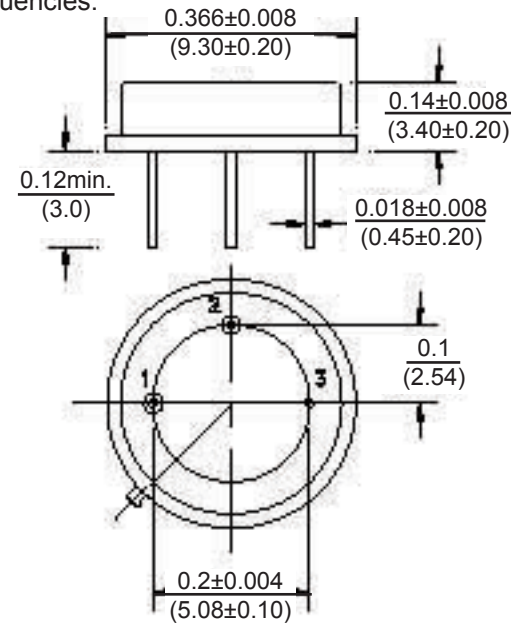
- Wireless car alarm, Garage door opener.
- Remote keyless entry.

## ABSOLUTE MAXIMUM RATINGS:

DC voltage	$\pm 30V$
Operating temperature	$-40^{\circ}C$ to $+85^{\circ}C$
Storage temperature	$-40^{\circ}C$ to $+85^{\circ}C$
Maximum power dissipation	10dBm

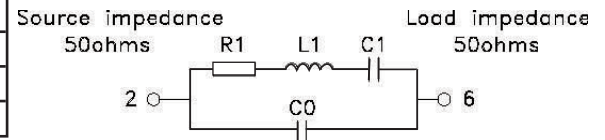
## STANDARD SPECIFICATIONS

CHARACTERISTIC		UNIT	min.	typ.	max.
Center frequency	Fr	MHz	309.925	310.000	310.075
Insertion loss	IL	dB	-	1.3	2.0
Unloaded quality factor	Q	-	-	15333	-
loaded quality factor	LQ	-	-	2,000	-
Aging per year		ppm	-	-	10
Shunt capacitance	Co	pF	1.8	2.1	2.4
Motional resistance	R1	Ω	-	15	24
Motional inductance	L1	μH	-	118.143	-
Motional capacitance	C1	fF	-	2.2333	-
Turn-over temperature	To	°C	25	40	55
Temperature coefficient	TC	ppm/C²	-	0.037	-

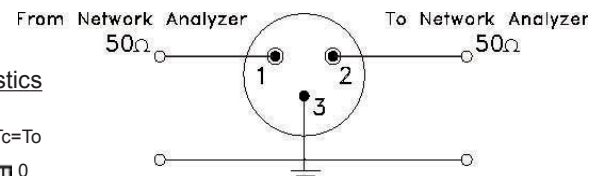


Pin No.	Function
1	Input/Output
2	Output/Input
3	Case GND

### Equivalent circuit:



### Test circuit:



### Marking:

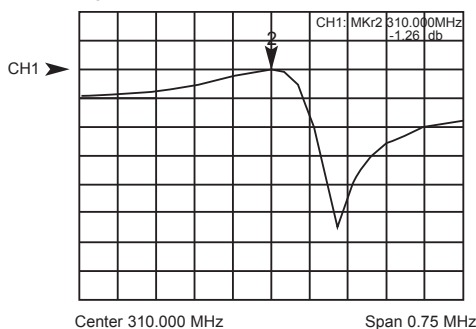
310  
AZY

(ZY: Date code)

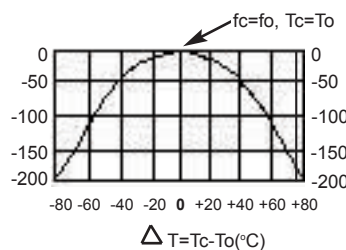
Reliability specifications, see SAW application notes.

### Typical Frequency Response

1: Transmission /M Log Mag 5.0 dB/ Ref -1.50 dB  
2: Off



### Temperature Characteristics



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