

SMD ONE PORT 310.0 MHz SAW RESONATOR

ASR310S2-01

APPLICATION: Automotive Electronics/Remote Control



5 x 3.5 x 1.5mm

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 | 2.5 |
| Quality Factor | Unloaded | - | | 11,800 | |
| | 50Ω loaded | | | 3,500 | |
| Temperature Stability | Turnover Temperature | °C | 37 | 52 | 67 |
| | Turnover Frequency | KHz | | Fc | |
| | Freq. Temp. Coefficient | ppm/°C ² | | 0.037 | |
| Frequency Aging | | ppm/year | | ±10 | |
| DC Insulation Resistance | | MΩ | 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. | | °C | -40°C to +85°C | | |
| Storage temp. | | °C | -45°C to +85°C | | |
| Max. Rating | DC voltage | V | ±10 | | |
| RF Power Dissipation | | dBm | 0 | | |

Data measured with: Source Impedance: Z_s=50Ω, Load Impedance: Z_L=50Ω, T_A=25°C

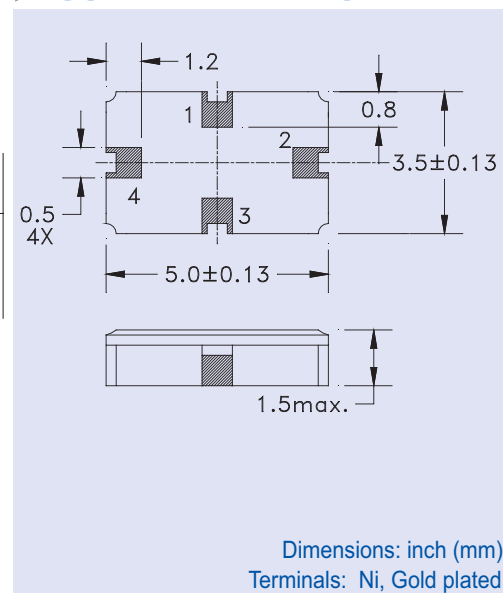
Electrostatic Sensitive Device. Handle with precaution.

MARKING:

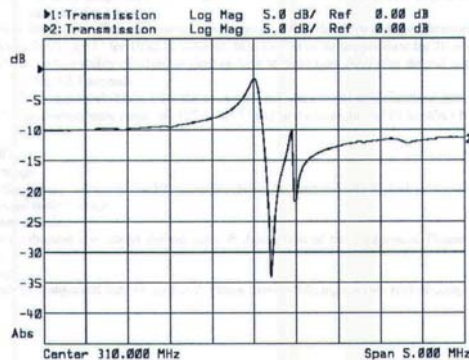
- 310-01 (310.0 Frequency in MHz)
- ASR ZYX (ZY: Date code Z for month from A to L; Y for year, i.e. 4 for 2004
X: Traceability code)

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

OUTLINE DRAWING:



FREQUENCY RESPONSE:



TEST CIRCUIT:

