

SMD ONE PORT 303.825 MHz SAW RESONATOR

ASR303.825E

APPLICATION: Automotive Electronics/Remote Control



5 x 5 x 1.5mm

STANDARD SPECIFICATIONS:

| CHARACTERISTICS | | UNIT | MIN. | TYP. | MAX. |
|--------------------------|-------------------------------------|---------------------|----------------|---------|-------|
| Center Frequency Fo | | MHz | 303.75 | 303.825 | 303.9 |
| Tolerance from Fo | | KHz | | ±75 | |
| Insertion Loss | | dB | - | 1.3 | 2.5 |
| Quality Factor | Unloaded | - | | 12,000 | |
| | 50Ω loaded | | | 2,000 | |
| Temperature Stability | Turnover Temperature | °C | | 39.0 | |
| | Turnover Frequency | KHz | | Fo | |
| | 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 | | 12 | 19 |
| | Motional Inductance L ₁ | μH | | 94.0 | |
| | Motional Capacitance C ₁ | fF | | 2.9 | |
| | Shunt Capacitance C ₀ | pF | 2.7 | 3.0 | 3.3 |
| 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

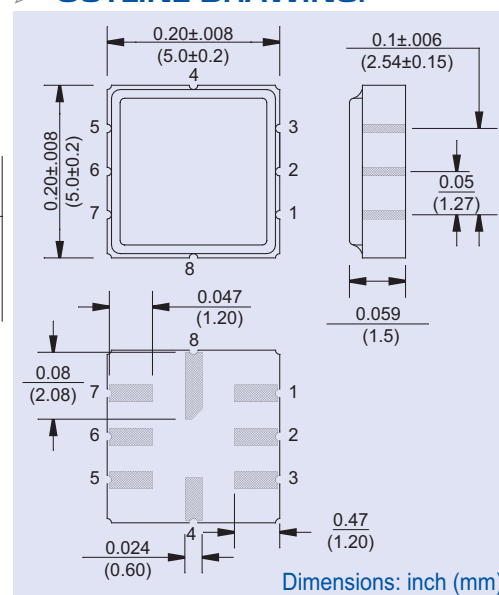
Electrostatic Sensitive Device. Handle with precaution.

MARKING:

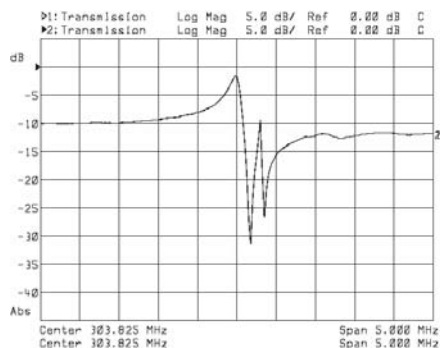
- 303.82 (303.825 Frequency in MHz)
- AR ZYX (ZY: Date code Z for month from A to L; Y for year, i.e. 4 for 2004 X: Traceability code)

| PIN NO. | CONNECTIONS |
|---------|-------------|
| 1 | Input GND |
| 2 | Input |
| 5 | Output GND |
| 6 | Output |
| 3,7 | To be GNDed |
| 4,8 | Case GND |

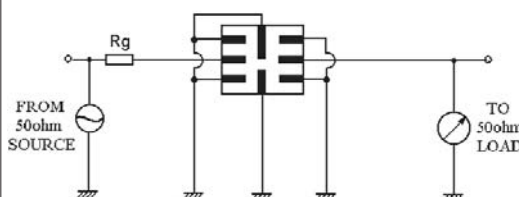
OUTLINE DRAWING:



FREQUENCY RESPONSE:



TEST CIRCUIT:



ABRACON IS
ISO 9001 / QS 9000
CERTIFIED



30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com