

# SMD ONE PORT 433.42 MHz SAW RESONATOR



5 x 5 x 1.35mm

ASR433.42E



**RoHS**  
Compliant

## STANDARD SPECIFICATIONS:

CHARACTERISTICS		UNIT	MIN.	TYP.	MAX.
Center Frequency $F_0$		MHz	433.345	433.420	433.495
Tolerance from $F_0$		KHz		$\pm 75$	
Insertion Loss		dB	-	1.5	2.5
Quality Factor	Unloaded	-		10,600	
	50 $\Omega$ loaded			2,200	
Temperature Stability	Turnover Temperature	$^{\circ}\text{C}$	25	40	55
	Turnover Frequency	KHz		$F_c$	
	Freq. Temp. Coefficient	ppm/ $^{\circ}\text{C}^2$		0.037	
Frequency Aging		ppm/year		$\pm 10$	
DC Insulation Resistance		M $\Omega$	1.0		
RF Equivalent RLC Model	Motional Resistance $R_1$	$\Omega$		19.0	33
	Motional Inductance $L_1$	$\mu\text{H}$		101.841	
	Motional Capacitance $C_1$	fF		1.3254	
	Shunt Capacitance $C_0$	pF		2.3	
Operating temp.		$^{\circ}\text{C}$	$-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$		
Storage temp.		$^{\circ}\text{C}$	$-45^{\circ}\text{C}$ to $+85^{\circ}\text{C}$		
Max. Rating	DC voltage	V	$\pm 10$		
RF Power Dissipation		dBm	10		

Data measured with: Source Impedance:  $Z_s=50\Omega$ , Load Impedance:  $Z_L=50\Omega$ ,  $T_A=25^{\circ}\text{C}$

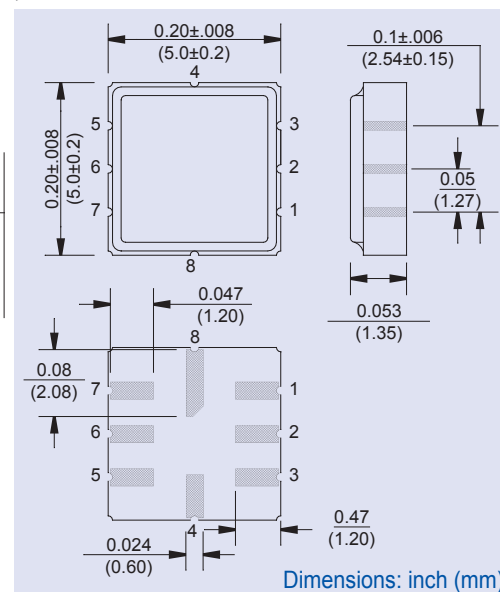
Electrostatic Sensitive Device. Handle with precaution.

## MARKING:

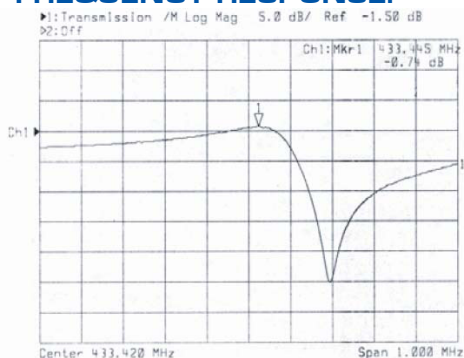
- 433.42R (433.42 Frequency in MHz)
- A ZYX (ZY: Date code Z for month from A to L; Y for year, i.e. 4 for 2004  
X: Traceability code)

PIN NO.	CONNECTIONS
2	Input/Output
6	Output/Input
4 & 8	Case Ground
1,3,5,7	N/C

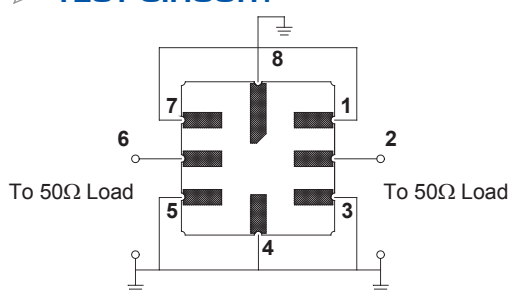
## OUTLINE DRAWING:



## FREQUENCY RESPONSE:



## TEST CIRCUIT:



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30332 Esperanza, Rancho Santa Margarita, California 92688  
tel 949-546-8000 | fax 949-546-8001 | [www.abracon.com](http://www.abracon.com)

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