

SMD ONE PORT SAW RESONATOR

ASR418S2



RoHS
Compliant



5.0 x 3.5 x 1.4mm

FEATURES:

- One port SAW
- Fundamental
- Seam sealed ceramic package assures high reliability
- Low insertion loss 1.2dB typical
- 50 ohms input/output impedance

APPLICATIONS:

- Transmitter
- Remote controller

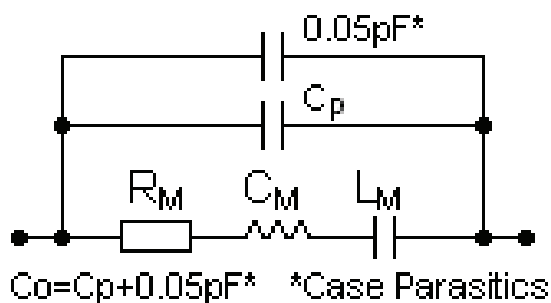
STANDARD SPECIFICATIONS

Key Electrical Specifications

Parameters	Minimum	Typical	Maximum	Units	Notes
Center Frequency (f_0)	417.925	418.000	418.075	MHz	418MHz $\pm$ 75kHz
Insertion Loss	-----	1.2	1.8	dB	
Quality Factor	-----	10,730	-----		Unloaded Q
	-----	1,400	-----		50 Ω loaded Q
Turnover Temperature	25	-----	50	$^{\circ}$ C	
Turnover Frequency	-----	F0	-----	MHz	
Freq. Temp. Coefficient	-----	0.032	-----	ppm/ $^{\circ}$ C	
Frequency Aging	-----	-----	$\leq \pm 10$	ppm/yr	
DC Insulation Resistance	1.0	-----	-----	M Ω	
Motional Resistance R1	-----	15	23	Ω	
Motional Inductance L1	-----	61.3325	-----	μ H	
Motional Capacitance C1	-----	2.3661	-----	fF	
Shunt Static Capacitance C0	2.05	2.35	2.65	pF	
Operation Temperature Range	-40	-----	+85	$^{\circ}$ C	
Storage Temperature Range	-45	-----	+85	$^{\circ}$ C	
DC Voltage between terminals	-----	-----	± 30	Vdc	
CW RF Power Dissipation	-----	-----	0	dBm	

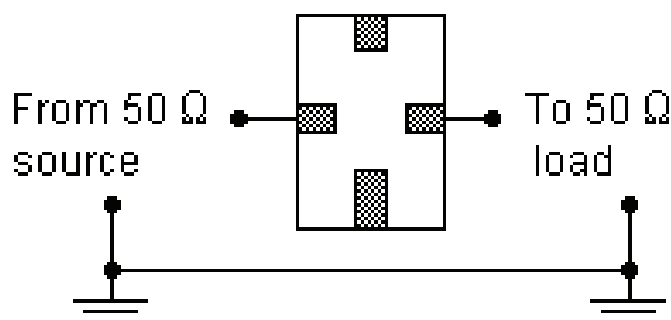
EQUIVALENT LC MODEL

Equivalent LC Model



TEST CIRCUIT

Test Circuit



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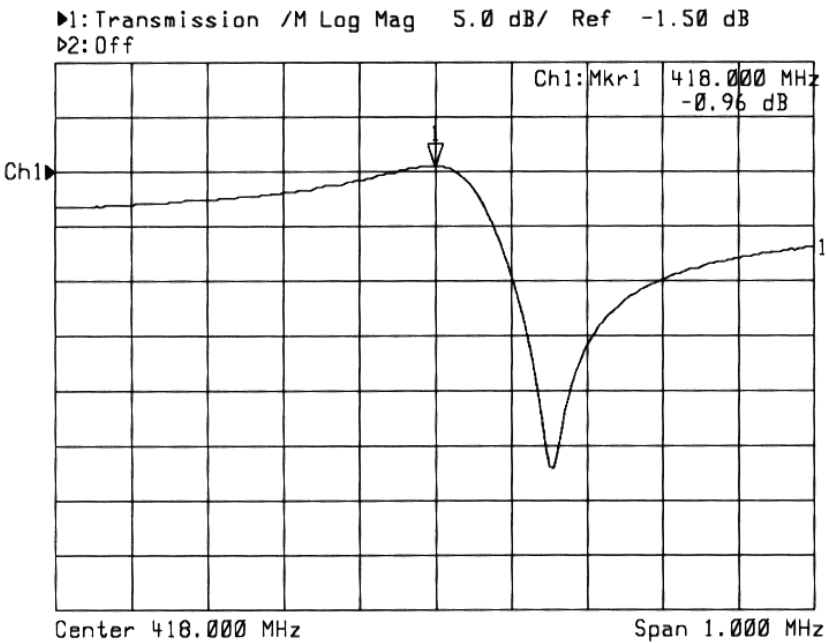


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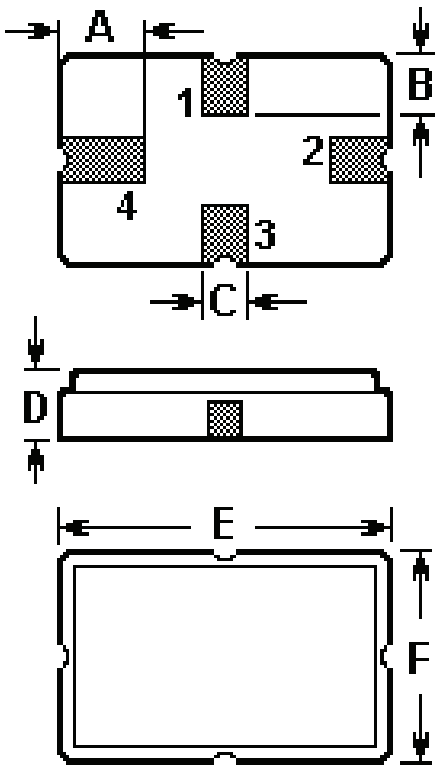


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TYPICAL FREQUENCY RESPONSE



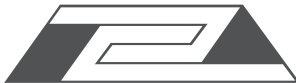
OUTLINE DIMENSIONS



Pin	Configuration
1	Input / Output
3	Output / Input
2/4	Case Ground

Dimension	Data (unit: mm)	Dimension	Data (unit: mm)
A	1.2	D	1.4
B	0.8	E	5.0
C	0.5	F	3.5

Dimensions: mm



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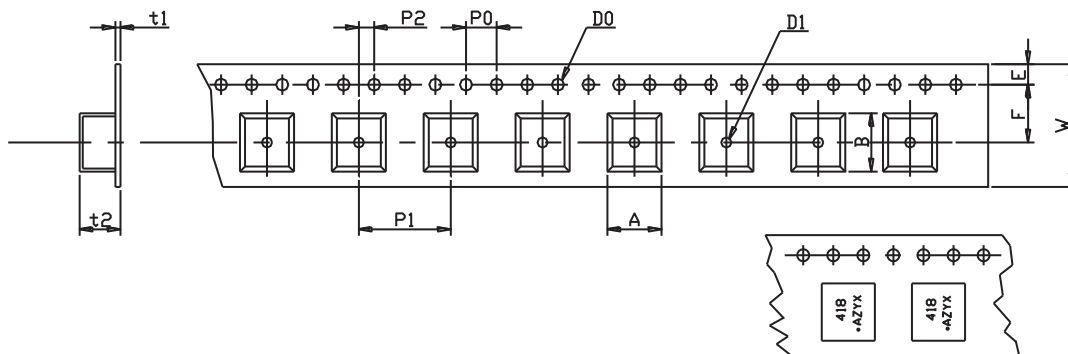


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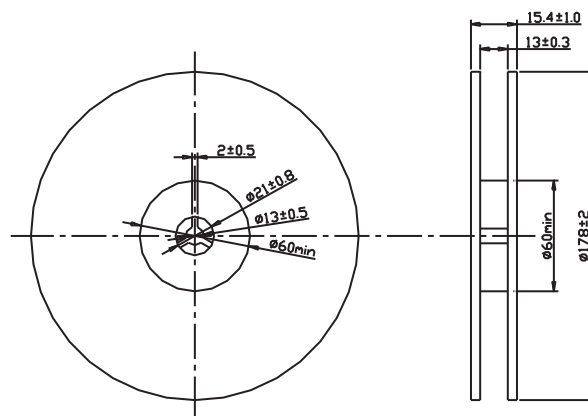


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TAPE & REEL: 1000pcs/reel

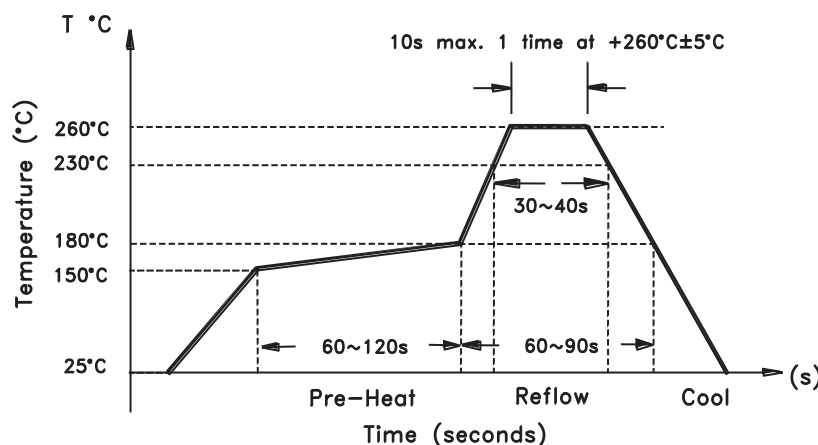


W	F	E	P0	P1	P2	D0	D1	t1	t2	A	B
12.0 ±0.3	5.5 ±0.1	1.75 ±0.1	4.0 ±0.2	8.0 ±0.1	2.0 ±0.2	Φ1.5 ±0.1	Φ1.5 ±0.25	0.31 max.	1.95 max.	3.8 max.	5.3 max.



Dimensions: mm

REFLOW PROFILE



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