



## SAW Bandpass Filter Specifications

Unit Name	SAW Bandpass Filter
Part Name	SY204330B
Date	April 27, 2004

Written by	Checked by	Approved by



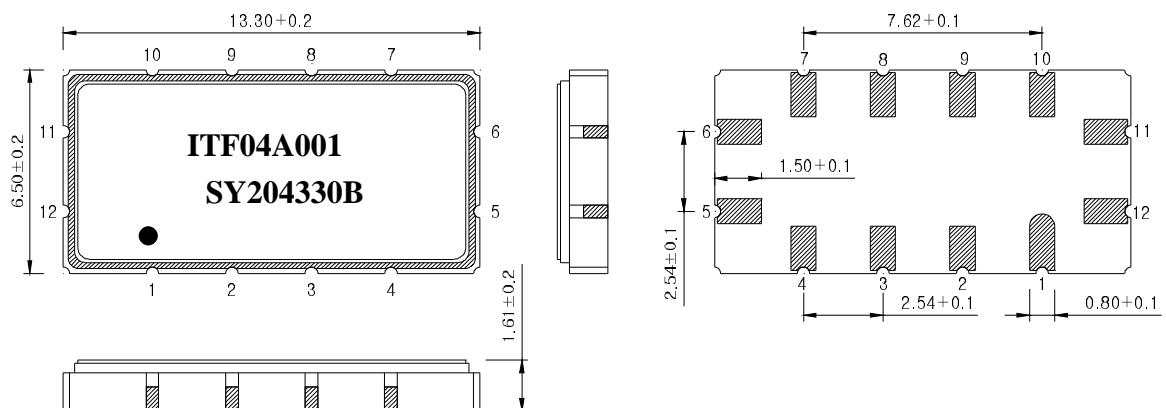
Systron Inc.  
1274 - 3<sup>rd</sup> Avenue South  
Lethbridge, Alberta  
T1J 0J9 Canada

Phone: (403) 327-1444  
Fax: (403) 327-1480  
e-mail: sales@systroninc.com

## 1. Features

- IF Bandpass Filter
- Low-Loss Filter
- Single-Ended Operation
- Ceramic Surface Mount Device (SMD) Package
- Maximum Storage Temperature Range : -40 °C ~ 85 °C
- Electrostatics Sensitive Device (ESD)

## 2. Package Dimensions



### Package : S1365

Dimensions shown are nominal in millimeters

Body : Al<sub>2</sub>O<sub>3</sub> Ceramic

Lid : Kovar, Ni Plated

Terminations : Au plating 0.3 ~ 1.0 um, Over a 1.27 ~ 8.89 um Ni Plating

Pad Configuration	
11	Input
5	Output
6, 12	Ground
Other	Case ground

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### 3. Specifications

Fo = 140.0 MHz

Terminating source impedance : 50Ω and matching network

Terminating load impedance : 50Ω and matching network

		Minimum	Typical	Maximum
Center Frequency	MHz	139.6	140.0	140.4
Insertion Loss	dB	-	6.4	9.0
1dB Bandwidth	MHz	-	6.3	-
3dB Bandwidth	MHz	7.2	7.3	-
40dB Bandwidth	MHz	-	11.5	11.9
Amplitude Ripple (Fo +/- 2.5 MHz)	dB	-	0.6	1.0
Group Delay Variation (Fo +/- 2.5 MHz)	nsec	-	70	120
Absolute Delay	usec	-	0.85	-
Ultimate Rejection	dB	40	45	-
Temperature Coefficient of Frequency	ppm/°C	-	-86	-

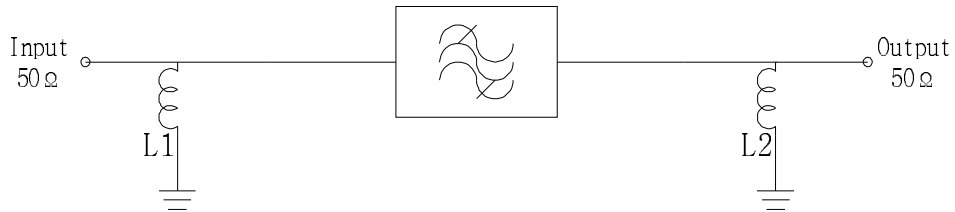
#### Notes :

- 1) All specifications are based on the matching schematic shown below
- 2) All specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature
- 3) All attenuation measurements are measured relative to insertion loss

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## 4. Matching Schematic

( Actual matching values may vary due to PCB layout and parasitics )



L1 = 39 nH,

L2 = 39 nH

## 5. Marking Configuration

ITF04A001<sup>1)</sup>

SY204330B<sup>2)</sup>

●<sup>3)</sup>

1) Lot Number

2) Part Number

3) Pad Number 1 Index

## 6. Typical Performance ( at +25°C )

