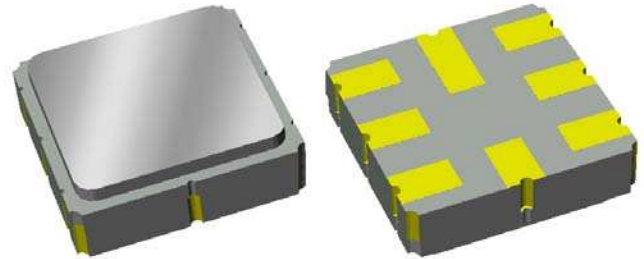


Preliminary Data Sheet

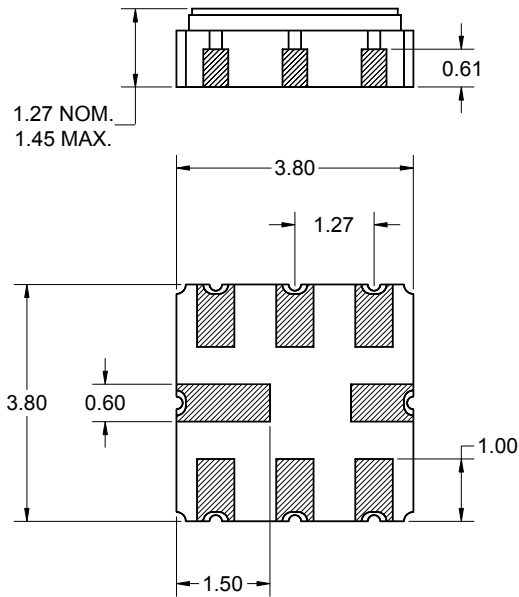
Features

- For WiMAX applications
- Usable bandwidth of 10 MHz
- Typical 1 dB bandwidth of 10 MHz
- Low loss
- High attenuation
- Single-ended or balanced operation
- Ceramic Surface Mount Package (SMP)
- Hermetic



Package

Surface Mount 3.80 x 3.80 x 1.27 mm

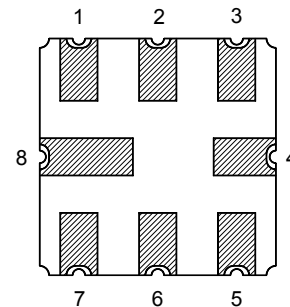


Dimensions shown are nominal in millimeters
 All tolerances are $\pm 0.15\text{mm}$ except overall
 length and width $\pm 0.10\text{mm}$

Body: Al_2O_3 ceramic
 Lid: Kovar, Ni plated
 Terminations: Au plating 0.5 - 1.0 μm ,
 over a 2 - 6 μm Ni plating

Pin Configuration

Bottom View



Pin No.	Description
2	Input
3	Input return
6	Output
7	Output return
1,4,5,8	Case ground

Preliminary Data Sheet

Electrical Specifications ⁽¹⁾

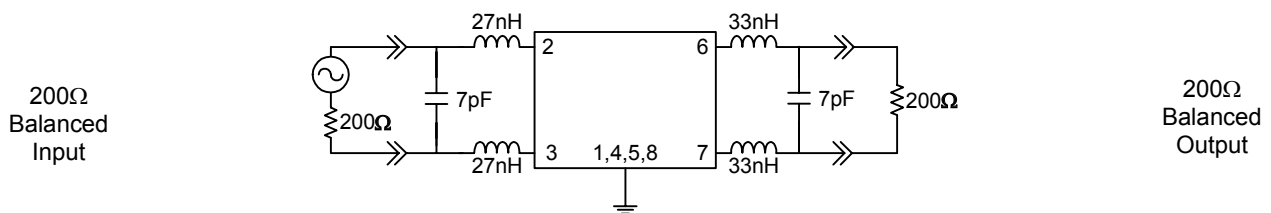
Operating Temperature Range: ⁽²⁾ -40 to +85 °C

Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency	-	374	-	MHz
Maximum Insertion Loss 369.0 - 379.0 MHz	-	9	10.5	dB
Lower 1 dB bandedge ⁽⁴⁾	-	366.5	369	MHz
Upper 1 dB bandedge	379	381.5	-	MHz
3 dB Bandwidth	-	18	-	MHz
Stop Band Rejection ⁽⁴⁾				
274.0 - 331.0 MHz	45	50	-	dB
331.0 - 352.0 MHz	35	45	-	dB
352.0 - 357.5 MHz	30	40	-	dB
357.5 - 361.5 MHz	10	20	-	dB
386.5 - 390.5 MHz	10	24	-	dB
390.5 - 396.0 MHz	30	40	-	dB
396.0 - 417.0 MHz	35	45	-	dB
417.0 - 474.0 MHz	40	50	-	dB
Amplitude Variation ⁽⁵⁾ 369.0 - 379.0 MHz	-	0.6	1.0	dB
Group Delay Ripple ⁽⁵⁾ 369.0 - 379.0 MHz	-	20	75	nsec
Source Impedance (Balanced) ⁽⁶⁾	-	200	-	Ω
Load Impedance (Balanced) ⁽⁶⁾	-	200	-	Ω

Notes:

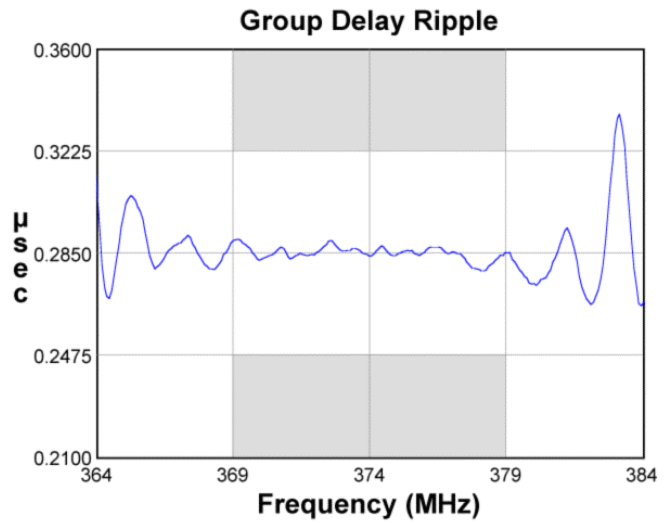
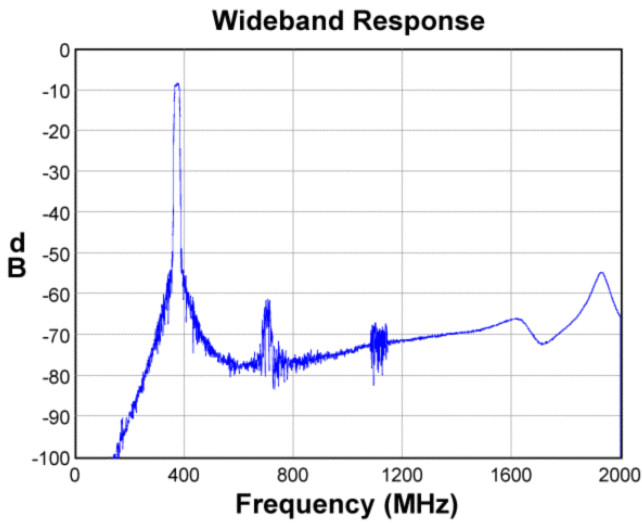
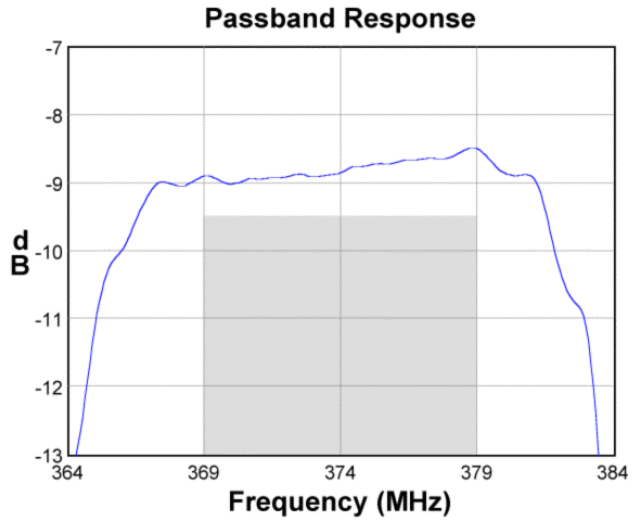
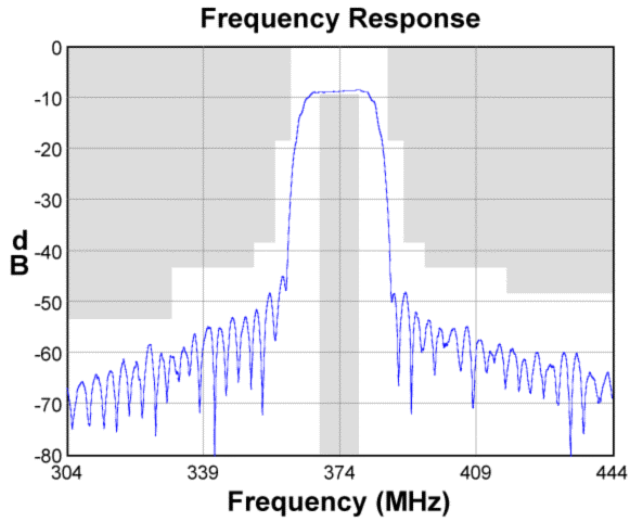
1. All specifications are based on the test circuit shown below
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
4. All attenuation measurements will be referenced to minimum insertion loss
5. Total variation measured over the defined frequency range
6. The filter can be matched for single-ended or balanced operation to an impedance of 50 Ohms to 750 Ohms

Test Circuit:

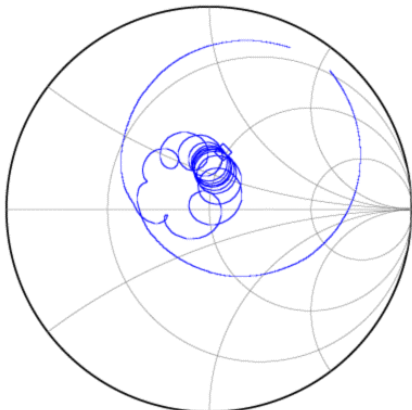


Preliminary Data Sheet

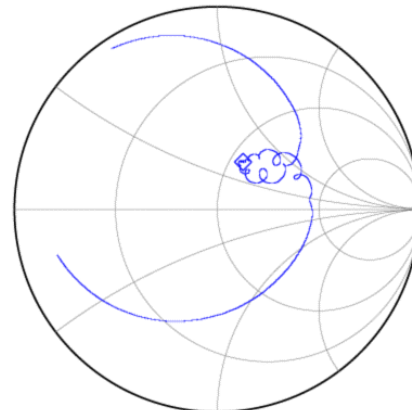
Typical Performance (at +25°C)



Input Smith Chart



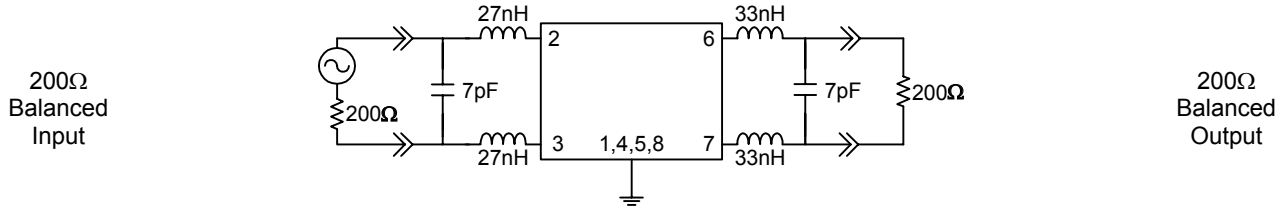
Output Smith Chart



Preliminary Data Sheet

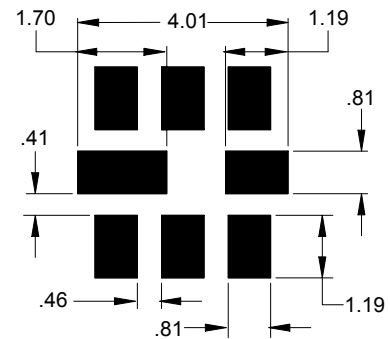
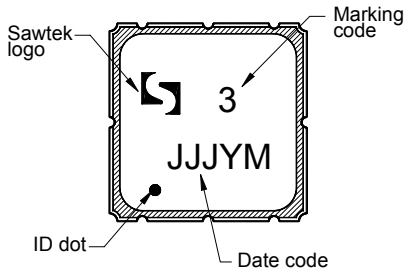
Matching Schematics

Actual matching values may vary due to PCB layout and parasitics



Marking

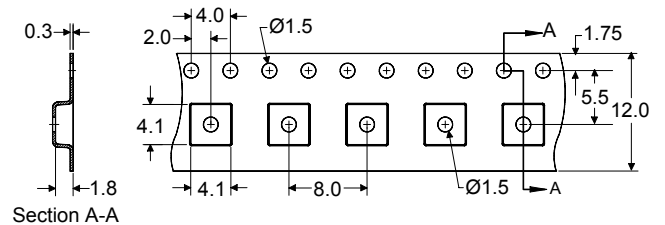
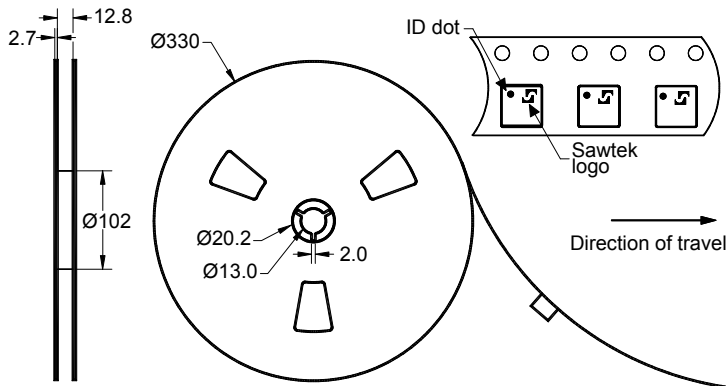
PCB Footprint



The date code consists of: JJJ = Julian day,
Y = last digit of year, M = manufacturing site code

This footprint represents a recommendation only
Dimensions shown are nominal in millimeters

Tape and Reel




Dimensions shown are nominal in millimeters
Packaging quantity: 4000 units/reel

Preliminary Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-40	+85	°C
Storage Temperature Range	T _{stg}	-40	+85	°C
Input Power (10,000 hrs, 374 MHz, CW)	P _{in}	-	+10	dBm

Warnings

- Electrostatic Sensitive Device (ESD) 
- Avoid ultrasonic exposure

Material Content

- Does not contain lead (Pb) or other RoHS restricted materials

Links to Additional Technical Information

[PCB Layout Tips](#)

[Qualification Flowchart](#)

[Soldering Profile](#)

[S-Parameters](#)

[Other Technical Information](#)

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[Representatives or distributors](#)