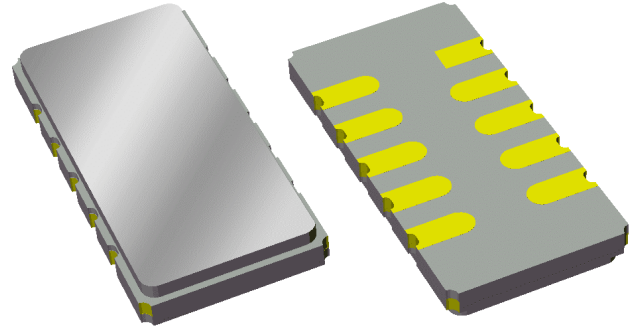


**Data Sheet**

**Features**

- For multichannel CDMA transceiver applications
- Usable bandwidth 3.75 MHz
- High attenuation
- Single-ended operation
- Ceramic Surface Mount Package (SMP)

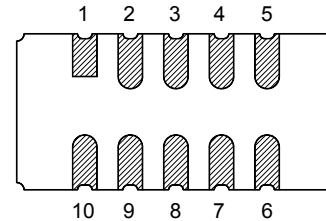
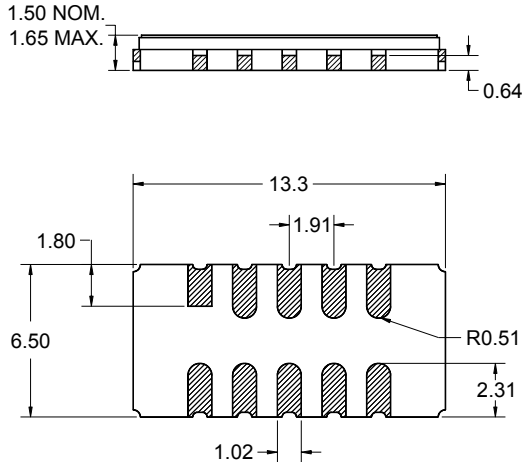


**Package**

Surface Mount 13.3 x 6.50 x 1.50 mm

**Pin Configuration**

Bottom View



Pin No.	Description
5	Output
10	Input
1,2,3,4	Case ground
6,7,8,9	Case ground

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

Body:  $Al_2O_3$  ceramic  
Lid: Kovar, Ni plated  
Terminations: Au plating 0.5 - 1.0 $\mu$ m,  
over a 2 - 6 $\mu$ m Ni plating

# Data Sheet

## Electrical Specifications <sup>(1)</sup>

Operating Temperature Range: <sup>(2)</sup> -40 to +85 °C

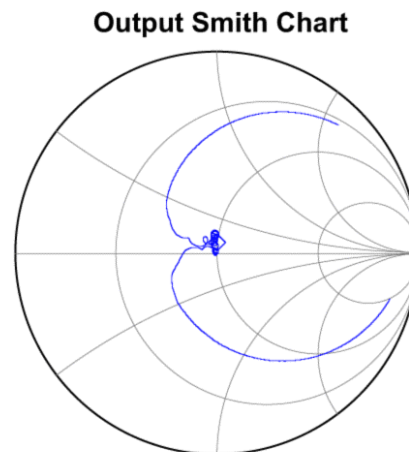
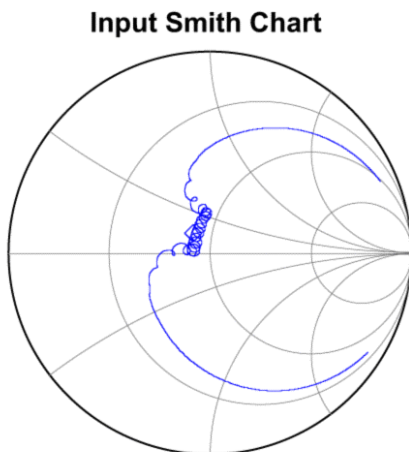
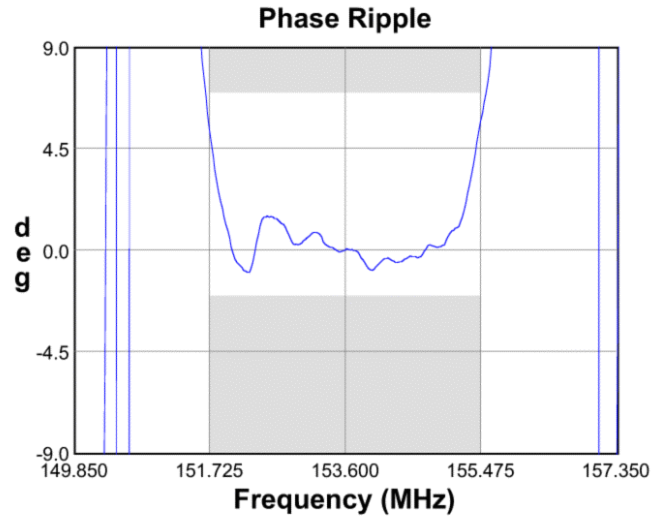
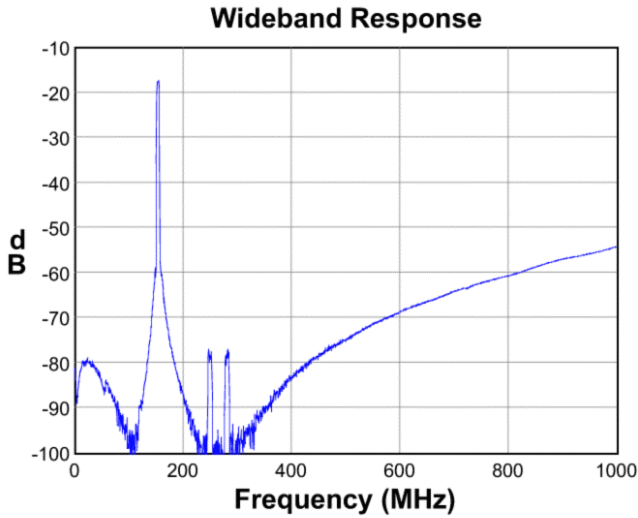
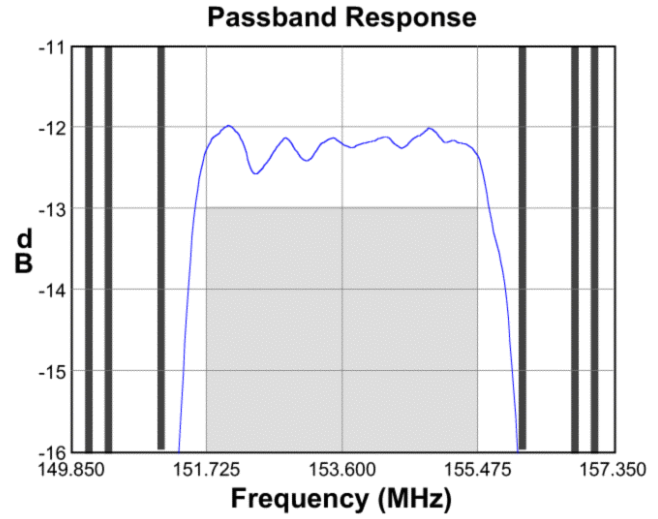
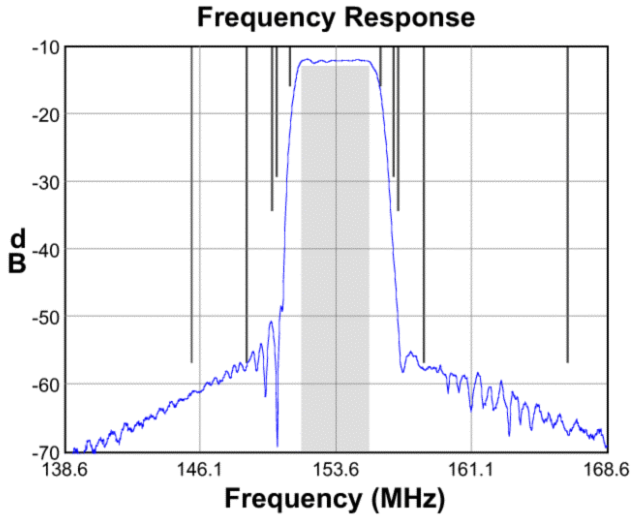
Parameter <sup>(3)</sup>	Minimum	Typical	Maximum	Unit
<b>Center Frequency</b>	-	153.6	-	MHz
<b>Minimum Insertion Loss</b>	-	12.04	14	dB
<b>Passband Variation</b>	-	0.603	1	dB p-p
<b>Lower 1 dB Bandedge <sup>(4)</sup></b>	-	151.616	151.725	MHz
<b>Upper 1 dB Bandedge</b>	155.475	155.644	-	MHz
<b>Phase Ripple (straight line fit)</b> 151.725 - 155.475 MHz	-	1.306	2.2	deg RMS
<b>Phase Ripple (straight line fit)</b> 151.725 - 155.475 MHz	-	7.033	9	deg p-p
<b>Minimum Rejection <sup>(4)</sup></b> 15 - 148.7 MHz	45	62.42	-	dB
158.5 - 200 MHz	45	56.143	-	dB
<b>Relative Attenuation <sup>(4)</sup></b> 145.65 MHz	45	72.75	-	dB
148.685 MHz	45	68.26	-	dB
148.7 MHz	45	68.97	-	dB
150.1 MHz	22.5	47.03	-	dB
150.37 MHz	17.5	44.44	-	dB
151.1 MHz	4	10.01	-	dB
156.1 MHz	4	5.21	-	dB
156.83 MHz	17.5	31.81	-	dB
157.1 MHz	22.5	44.65	-	dB
158.5 MHz	45	69.75	-	dB
166.47 MHz	45	75.69	-	dB
<b>Input/Output VSWR</b> 151.725 - 155.475 MHz	-	1.5:1	2.51:1	-
<b>Source Impedance <sup>(5)</sup></b>	-	50	-	Ω
<b>Load Impedance <sup>(5)</sup></b>	-	50	-	Ω

**Notes:**

1. All specifications are based on the test circuit shown on page 4
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 are relative to minimum insertion loss
5. This is the optimum impedance in order to achieve the performance shown

**Data Sheet**

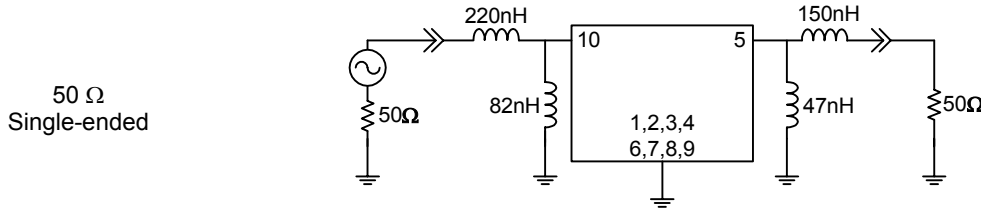
**Typical Performance (at +25°C)**



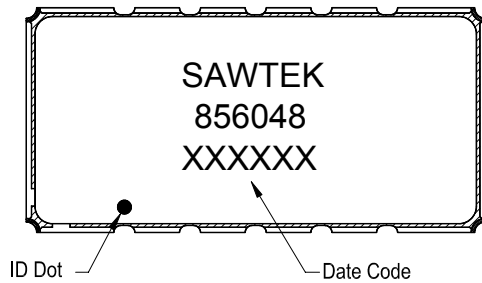
**Data Sheet**

**Matching Schematics**

Actual matching values may vary due to PCB layout and parasitics

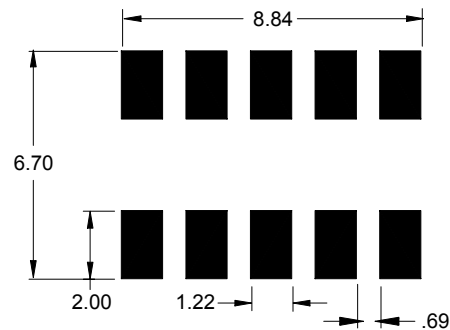


**Marking**



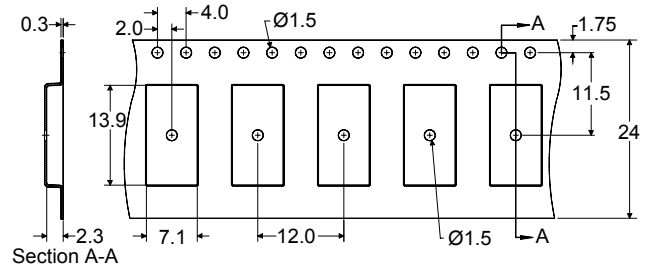
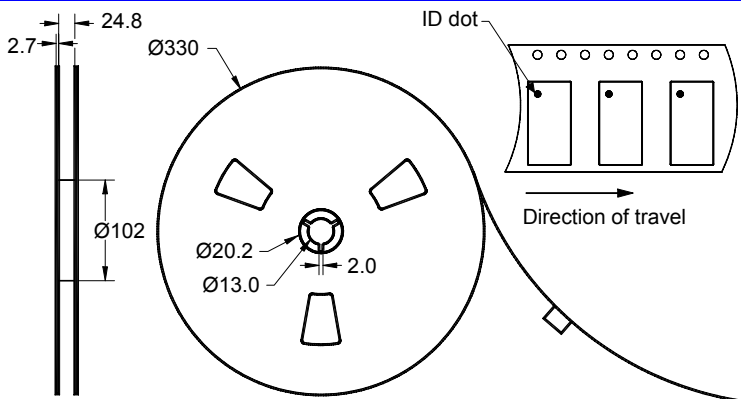
The date code consists of: day of the current year (Julian, 3 digits), last digit of the year (1 digit) and hour (2 digits)

**PCB Footprint**



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

**Tape and Reel**



Dimensions shown are nominal in millimeters  
Packaging quantity: 2000 units/reel

# Data Sheet

## Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-40	+85	°C
Storage Temperature Range	T <sub>stg</sub>	-60	+125	°C

### Warnings

- Electrostatic Sensitive Device (ESD)
- Avoid ultrasonic exposure



## Links to Additional Technical Information

[PCB Layout Tips](#)

[Qualification Flowchart](#)

[Soldering Profile](#)

[S-Parameters](#)

[Other Technical Information](#)

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[Representatives](#) or [distributors](#)