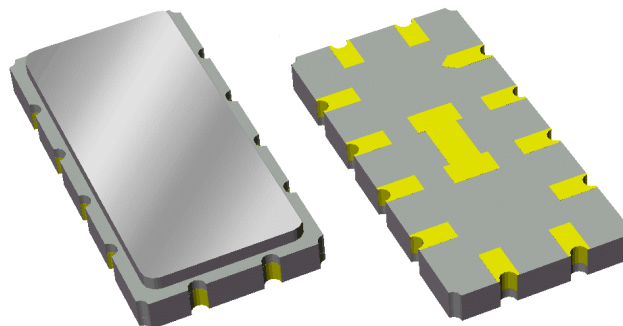


Preliminary Data Sheet

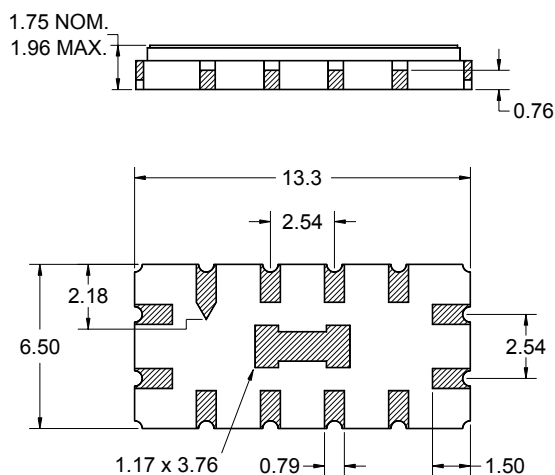
Features

- For WCDMA BTS applications
- Usable bandwidth 4.2 MHz
- High attenuation
- Single-ended operation
- Ceramic Surface Mount Package (SMP)
- Small size



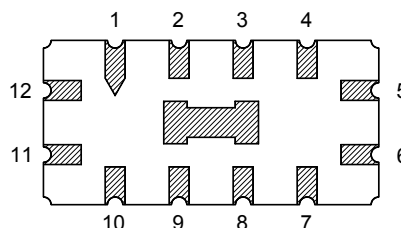
Package

Surface Mount 13.30 x 6.50 x 1.75 mm



Pin Configuration

Bottom View



Pin No.	Description
5	Output
11	Input
1,2,3,4,6	Case ground
7,8,9,10,12	Case ground

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

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

Preliminary Data Sheet

Electrical Specifications ⁽¹⁾

Operating Temperature Range: ⁽²⁾ 0 to +70 °C

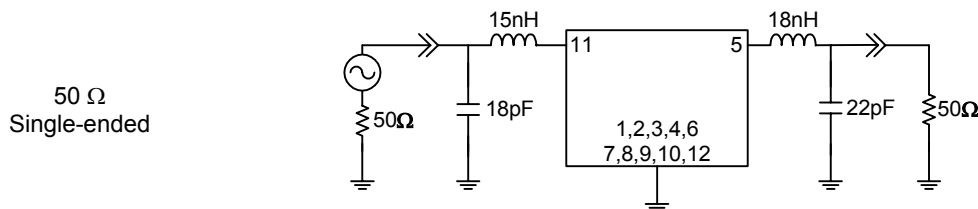
Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency	-	380	-	MHz
Insertion Loss at 380 MHz	-	15.4	17	dB
Lower 1.5 dB Point ⁽⁴⁾	-	377.65	377.9	MHz
Upper 1.5 dB Point ⁽⁴⁾	382.1	382.26	-	MHz
Lower 10 dB Point ⁽⁴⁾	376.75	377.16	-	MHz
Upper 10 dB Point ⁽⁴⁾	-	382.85	383.25	MHz
Lower 20 dB Point ⁽⁴⁾	376.35	376.92	-	MHz
Upper 20 dB Point ⁽⁴⁾	-	383.13	383.65	MHz
Lower 30 dB Point ⁽⁴⁾	375.85	376.76	-	MHz
Upper 30 dB Point ⁽⁴⁾	-	383.4	384.15	MHz
Passband Ripple 377.9 - 382.1 MHz	-	0.29	1	dB p-p
Group Delay 377.9 - 382.1 MHz	1.291	1.297	1.303	μsec
Group Delay Variation 377.9 - 382.1 MHz	-	36	100	nsec
Source Impedance ⁽⁵⁾	-	50	-	Ω
Load Impedance ⁽⁵⁾	-	50	-	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. Relative to insertion loss at 380 MHz
5. This is the optimum impedance in order to achieve the performance shown

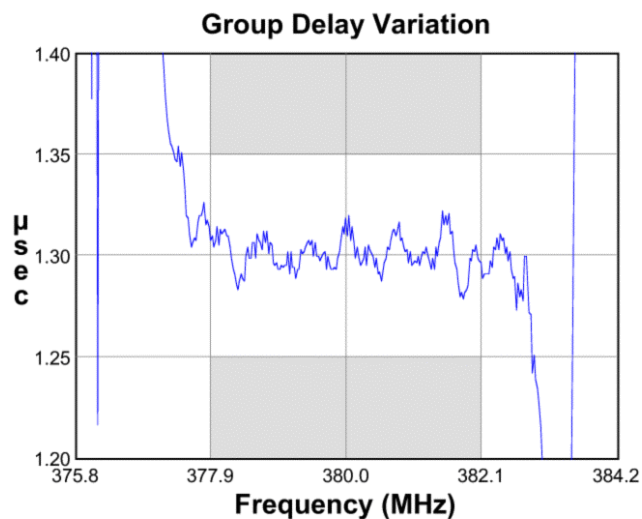
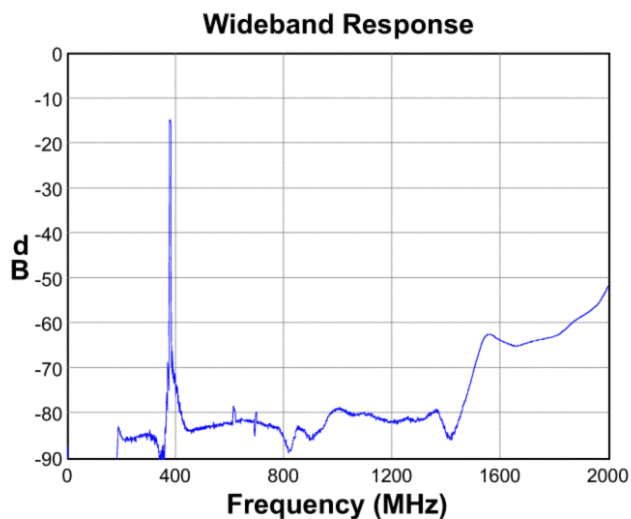
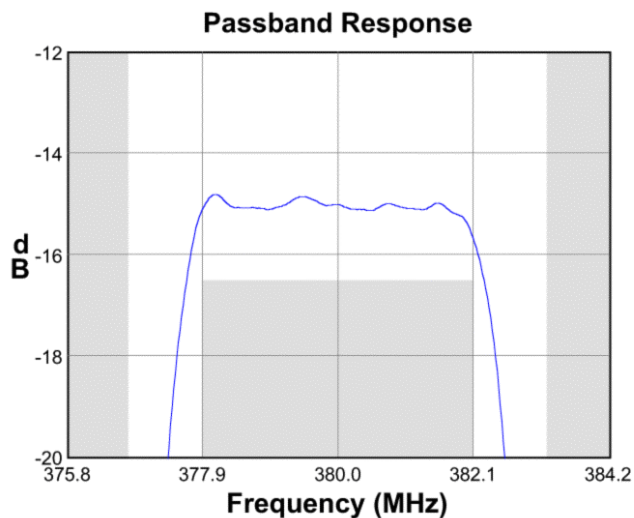
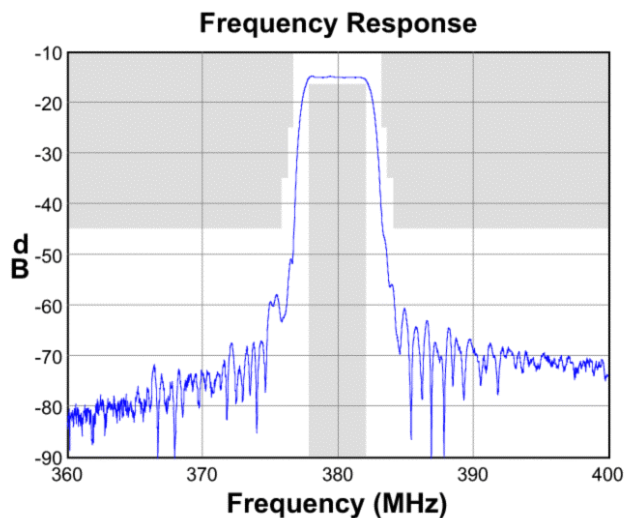
Test Circuit:

Actual matching values may vary due to PCB layout and parasitics

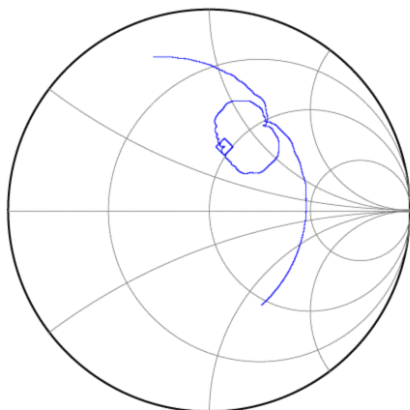


Preliminary Data Sheet

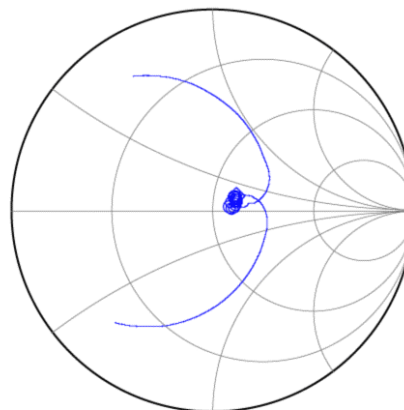
Typical Performance (at +25°C)



Input Smith Chart



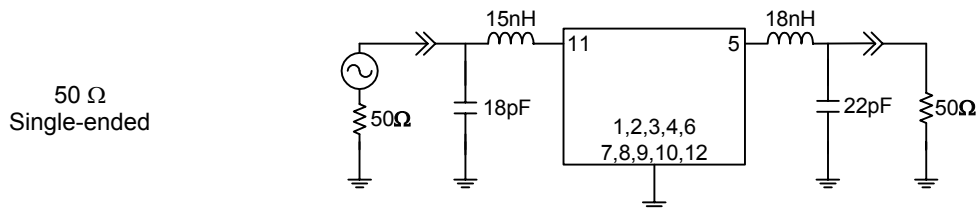
Output Smith Chart



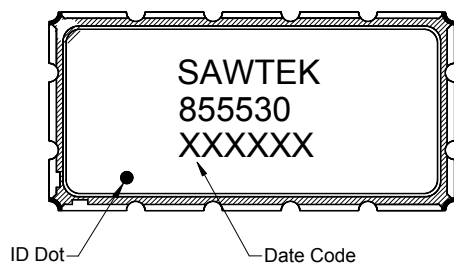
Preliminary Data Sheet

Matching Schematics

Actual matching values may vary due to PCB layout and parasitics

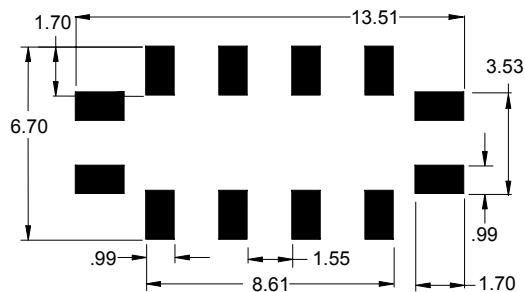


Marking



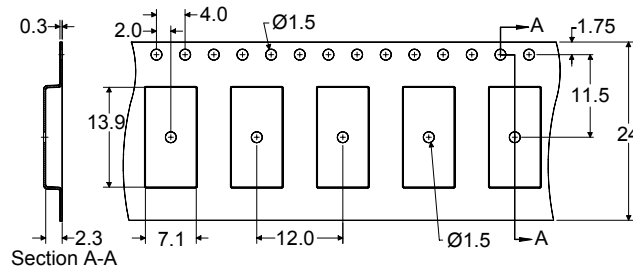
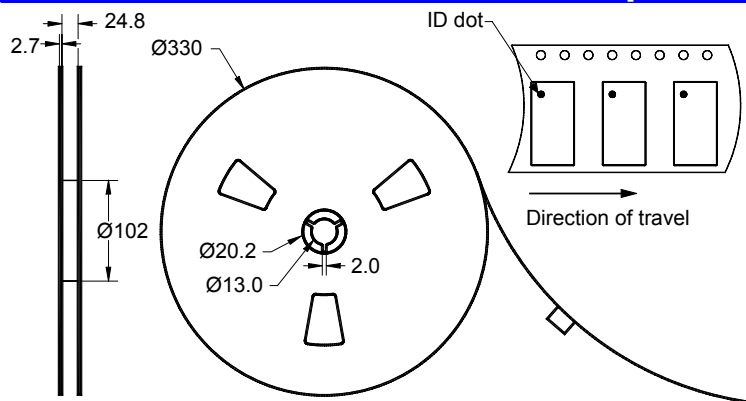
The date code consists of: day of the current year (Julian, 3 digits), last digit of the year (1 digit) and hour (2 digits)

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

Preliminary Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	0	+70	°C
Storage Temperature Range	T _{stg}	-40	+85	°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](#)