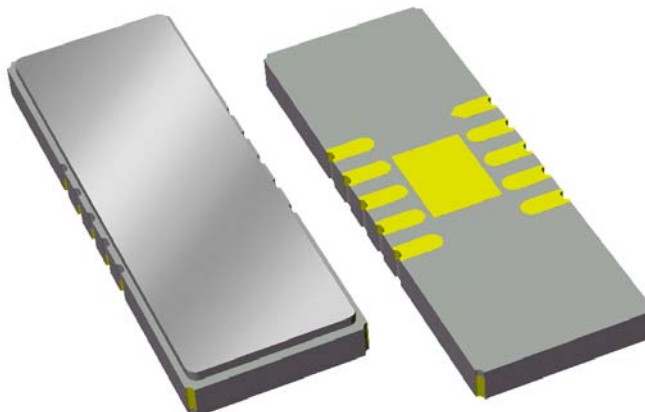


Preliminary Data Sheet

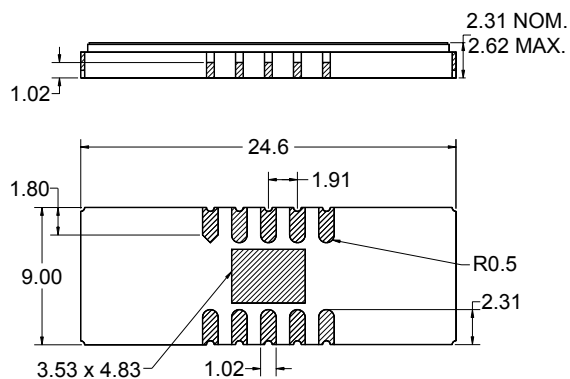
Features

- For cable headend IF applications
- Usable bandwidth 6.0 MHz
- High attenuation
- Single-ended operation
- Ceramic Surface Mount Package (SMP)



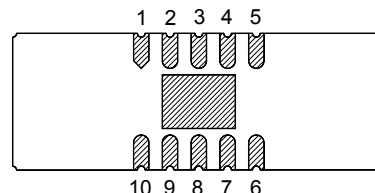
Package

Surface Mount 24.6 x 9.00 x 2.31 mm



Pin Configuration

Bottom View



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

Dimensions shown are nominal in millimeters
 All tolerances are ± 0.15 mm except overall
 length ± 0.20 mm and width $+0.13/-0.20$ 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⁾

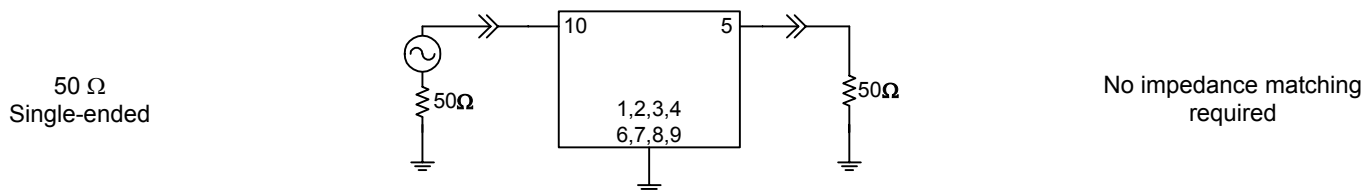
Operating Temperature: ⁽²⁾ +25 °C

Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency	-	44.0	-	MHz
Minimum Insertion Loss	-	20.8	22.0	dB
Lower 3 dB Bandedge ⁽⁴⁾	-	40.95	41.0	MHz
Upper 3 dB Bandedge	47.0	47.07	-	MHz
Lower 38 dB Bandedge ⁽⁴⁾	40.0	40.35	-	MHz
Upper 38 dB Bandedge	-	47.75	48	MHz
Passband Variation 41.5 - 46.5 MHz	-	0.63	0.75	dB
Phase Linearity 41.9 - 46.1 MHz	-	3.35	4.25	deg
Group Delay Variation 41.9 - 46.1 MHz	-	80	100	μsec
Stopband Attenuation ⁽⁴⁾ 24 - 40 MHz	38	45	-	dB
48 - 84 MHz	38	45	-	dB
Source Impedance ⁽⁵⁾	-	50	-	Ω
Load Impedance ⁽⁵⁾	-	50	-	Ω

Notes:

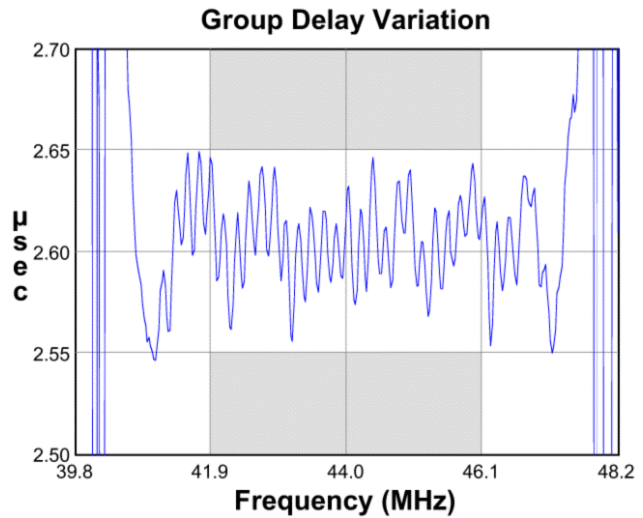
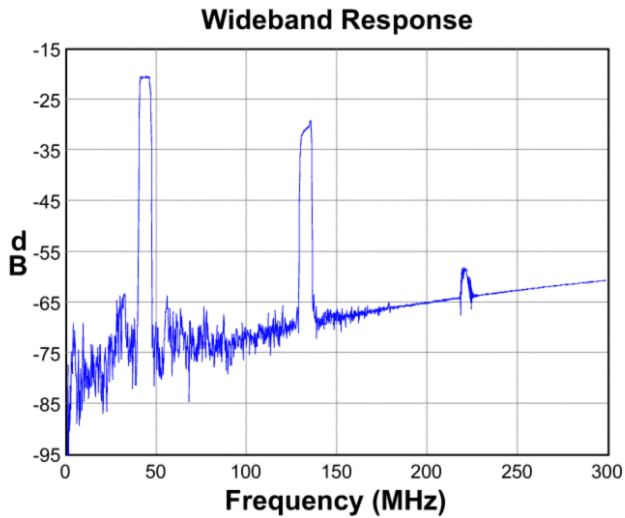
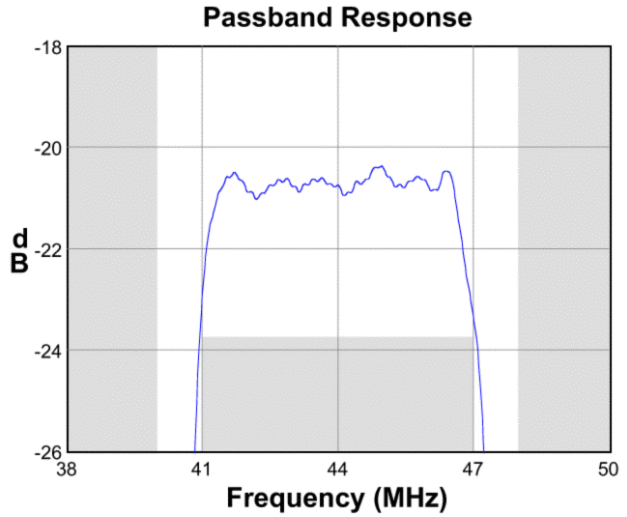
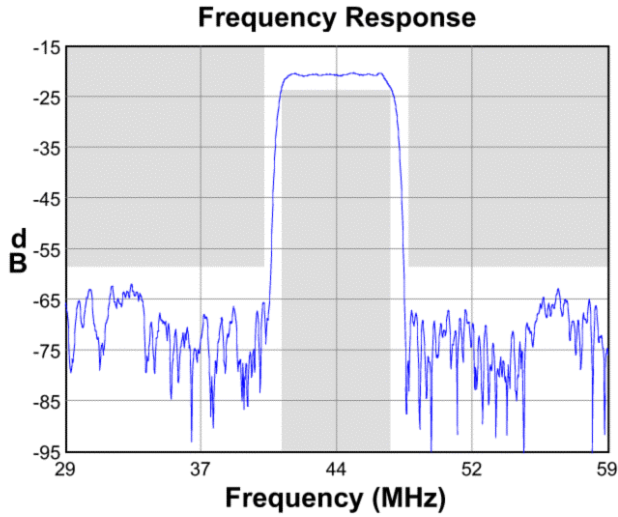
1. All specifications are based on the test circuit shown below
2. This specification is valid for room temperature only
3. Electrical margin has been built into the design to account for the variations due to manufacturing tolerances
4. All attenuation measurements are measured relative to minimum insertion loss
5. This is the optimum impedance in order to achieve the performance shown

Test Circuit:

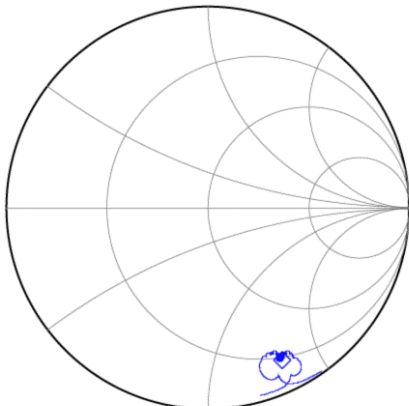


Preliminary Data Sheet

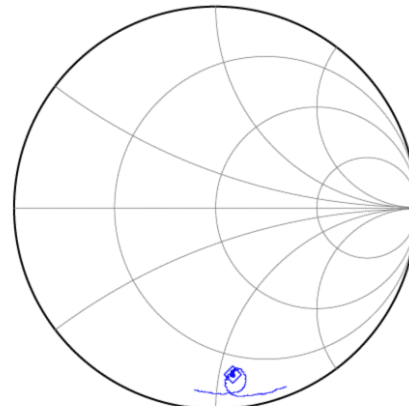
Typical Performance (at +25°C)



Input Smith Chart



Output Smith Chart




Preliminary Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating Temperature Range	T	-	25	-	°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](#)

Sawtek's liability is limited only to the Surface Acoustic Wave (SAW) component(s) described in this data sheet. Sawtek does not accept any liability for applications, processes, circuits or assemblies which are implemented using any Sawtek component described in this data sheet.

Contact Information



PO Box 609501
Orlando, FL 32860-9501
USA

Phone: +1 (407) 886-8860
Fax: +1 (407) 886-7061
Email: custservice@sawtek.com
Web: www.sawtek.com

Or contact one of our worldwide network of [sales offices](#), [representatives](#) or [distributors](#)