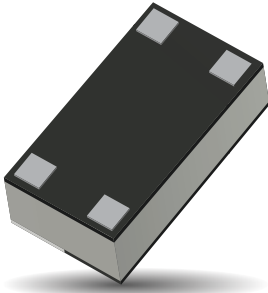


Thin-Film RF/Microwave Filters

BP2816 8W Band Pass Filter

General Information



ITF TECHNOLOGY

The ITF LGA Filter is based on thin-film multilayer technology. The technology provides a miniature part with excellent high frequency performance and rugged construction for reliable automatic assembly.

The ITF Filter is offered in a variety of frequency bands compatible with various types of high frequency wireless systems.

FEATURES

- Small size: 7x4x1mm (LxWxT)
- Band: 240 - 1260 MHz
- Characteristic impedance: 50Ω
- Operating / Storage temp: -40°C – 85°C
- Power Handling: 8W (continuous)
- Low profile
- Rugged construction
- Taped and reeled
- RoHS compliant

APPLICATIONS

- VHF \ UHF applications
- Mobile communications
- MRI application
- Radar
- Vehicle location systems
- Wireless LAN's

HOW TO ORDER

BP	2816	A	XXXX	S	N	TR
Series	Case Size	Type	Frequency (MHz)	Sub-Type	Termination	Taped & Reeled

FINAL QUALITY INSPECTION

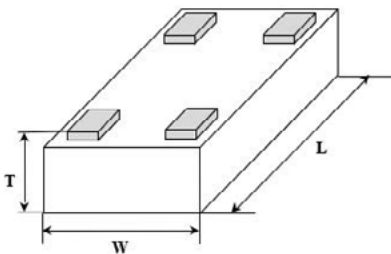
Finished parts are 100% tested for electrical parameters and visual/ mechanical characteristics. Each production lot is evaluated on a sample basis for:

- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance : 125°C, IR, 4 hours

TERMINATION

Nickel/ Lead-free Solder coating (Sn100) compatible with automatic soldering technologies: reflow, wave soldering, vapor phase and manual.

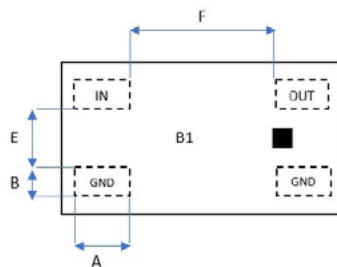
DIMENSIONS (BOTTOM VIEW)



mm (inches)

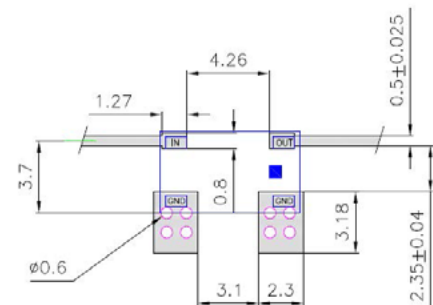
L	7.2 ± 0.3
W	4.2 ± 0.2
T	1.2 max
A	1.1 ± 0.1

TERMINALS (TOP VIEW)



B	0.6 ± 0.1
E	2.4 ± 0.1
F	4.43 ± 0.1

RECOMMENDED PAD LAYOUT (MM)



* The recommended distance to the PCB Ground Plane is 0.254 mm (0.010")

** PCB: Taconic Orcon RF-35P

Thin-Film RF/Microwave Filters

BP2816 8W Band Pass Filter

Electrical Performance Table



ELECTRICAL PERFORMANCE

Part Number	Passband				Stopband Rejection					
	Frequency		I.L	R.L	Low Band		High Band			
			dB (max)	dB (Typ)	Band	Rejection	Band	Rejection	Band	Rejection
					MHz	dB	MHz	dB	MHz	dB
BP2816A0280SNTR	240	320	-1.5	-15	140	-35	480 - 640	-35	640 - 1000	-35
BP2816A0300SNTR	270	300	-1.5	-15	140	-35	600 - 1000	-35	1000 - 1600	-38
BP2816A0312SNTR	225	400	1.3	-15	100	-40	450 - 660	-20	675 - 990	-37
BP2816A0350SNTR	280	420	-1.5	-15	160	-35	600 - 1000	-35	1000 - 2500	-45
BP2816A0480SNTR	370	590	-1.3	-15	200	-40	800 - 1500	-38	1501 - 3000	-45
BP2816A0660SNTR	520	800	-1.4	-12	330	-40	1100 - 1680	-35	1690 - 3500	-37
BP2816A0768SNTR	668	868	-2.5	-15	500	-30	1100 - 1400	-37	---	---
BP2816A1010SNTR	760	1260	-1.3	-15	450	-33	1600 - 2000	-35	2000 - 4500	-40

Thin-Film RF/Microwave Filters

BP2816 8W Band Pass Filter

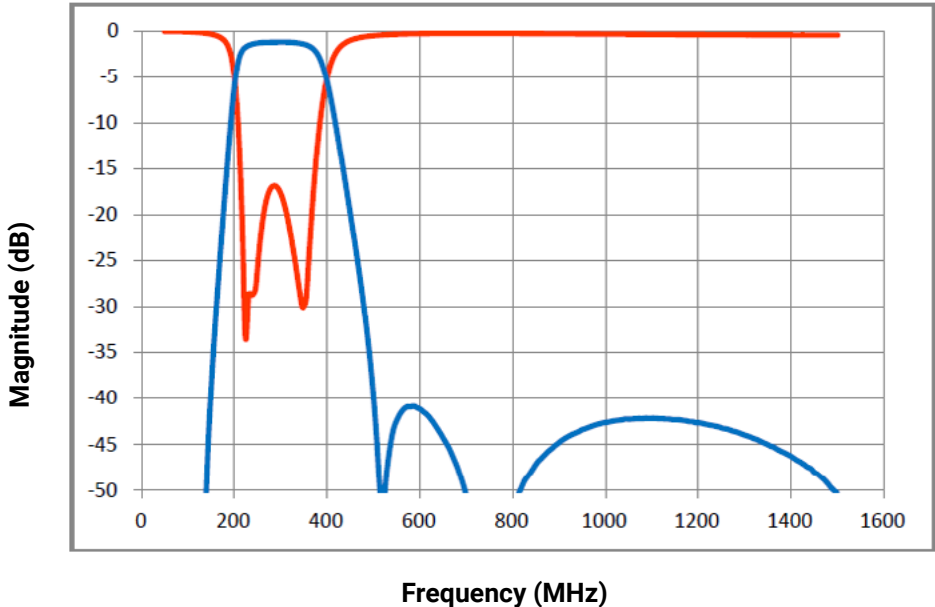
BP2816A0280SNTR



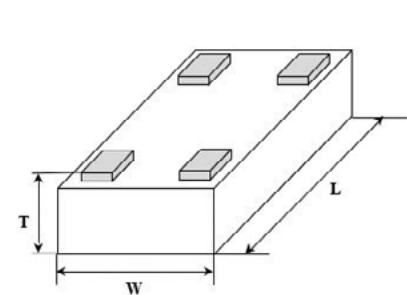
ELECTRICAL CHARACTERISTICS

Description	Value
Center frequency	280 MHz
Impedance	50 ohm
I. loss 240 - 320 MHz	-1.5 dB
In-band return loss	-15 dB
Rejection @ 140 MHz	-35 dB
Rejection @ 480 - 640 MHz	-35 dB
Rejection @ 640 - 1000 MHz	-40 dB
Power handling (CW)	8 Watt
Operating temperature range	-40/+85 °C
Package	2816

TYPICAL ELECTRICAL PERFORMANCE

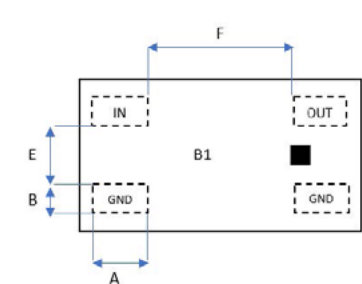


DIMENSIONS (BOTTOM VIEW)



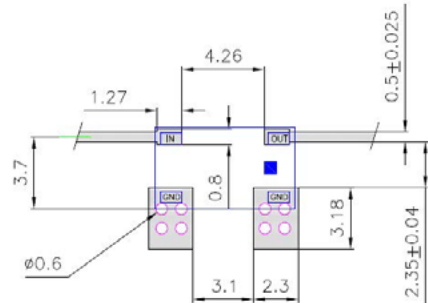
mm (inches)	
L	7.2 ± 0.3
W	4.2 ± 0.2
T	1.2 max
A	1.1 ± 0.1

TERMINALS (TOP VIEW)



B	0.6 ± 0.1
E	2.4 ± 0.1
F	4.43 ± 0.1

RECOMMENDED PAD LAYOUT (MM)



* The recommended distance to the PCB Ground Plane is 0.254 mm (0.010")
 ** PCB: Taconic Orcer RF-35P

EVB P/N: JIG544-7084

Thin-Film RF/Microwave Filters

BP2816 8W Band Pass Filter

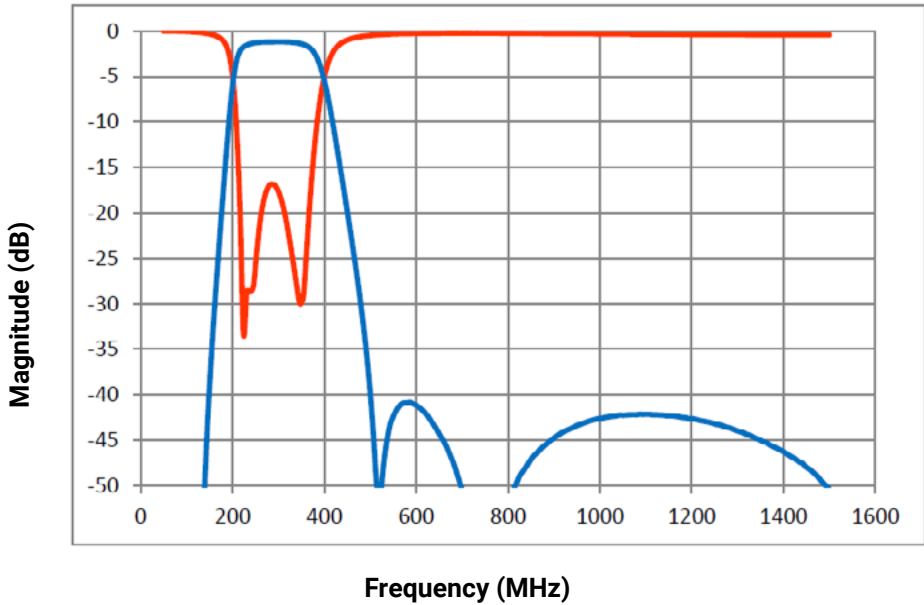
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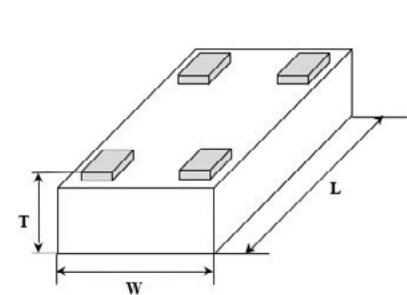
ELECTRICAL CHARACTERISTICS

Description	Value
Center frequency	300 MHz
Impedance	50 ohm
I. loss 270 - 330 MHz	-1.5 dB
In-band return loss	-15 dB
Rejection @ 140 MHz	-35 dB
Rejection @ 600 - 1000 MHz	-35 dB
Rejection @ 1000 - 1600 MHz	-35 dB
Power handling (CW)	8 Watt
Operating temperature range	-40/+85 °C
Package	2816

TYPICAL ELECTRICAL PERFORMANCE



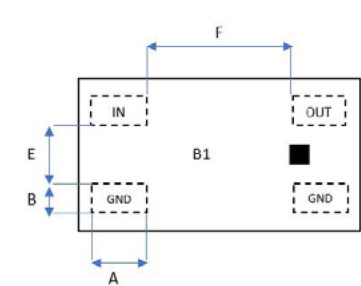
DIMENSIONS (BOTTOM VIEW)



mm (inches)

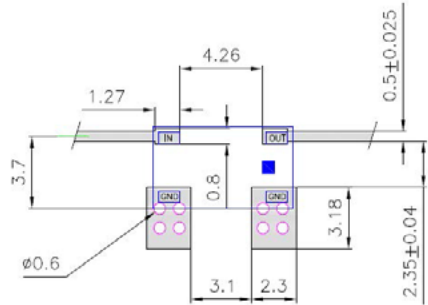
L	7.2 ± 0.3
W	4.2 ± 0.2
T	1.2 max
A	1.1 ± 0.1

TERMINALS (TOP VIEW)



B	0.6 ± 0.1
E	2.4 ± 0.1
F	4.43 ± 0.1

RECOMMENDED PAD LAYOUT (MM)



* The recommended distance to the PCB Ground Plane is 0.254 mm (0.010")
 ** PCB: Taconic Orcon RF-35P

EVB P/N: JIG544-7084

Thin-Film RF/Microwave Filters

BP2816 8W Band Pass Filter

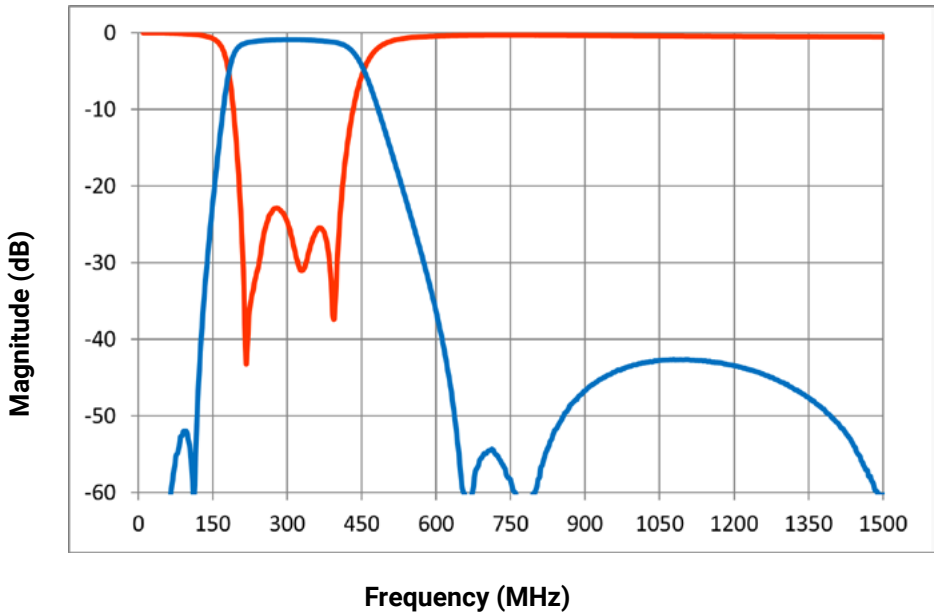
BP2816A0312SNTR



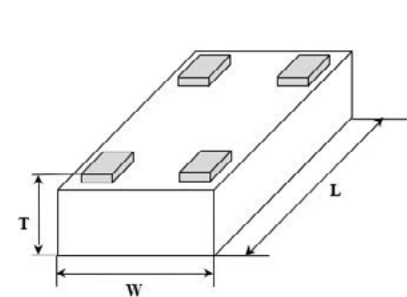
ELECTRICAL CHARACTERISTICS

Description	Value
Center frequency	312 MHz
Impedance	50 ohm
I. loss 270 - 330 MHz	-1.3 dB
In-band return loss	-15 dB
Rejection @ 140 MHz	-40 dB
Rejection @ 600 - 990 MHz	-50 dB
Rejection @ 990 - 1500 MHz	-40 dB
Power handling (CW)	8 Watt
Operating temperature range	-40/+85 °C
Package	2816

TYPICAL ELECTRICAL PERFORMANCE



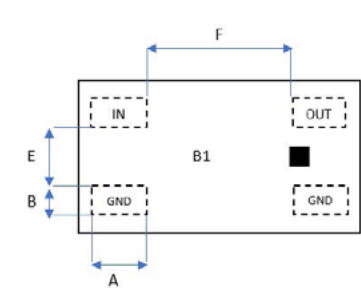
DIMENSIONS (BOTTOM VIEW)



mm (inches)

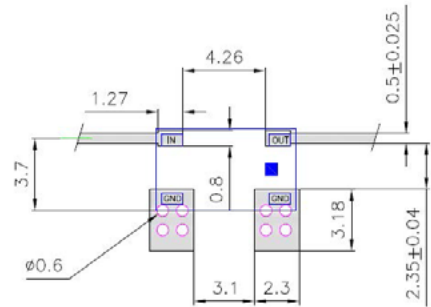
L	7.2 ± 0.3
W	4.2 ± 0.2
T	1.2 max
A	1.1 ± 0.1

TERMINALS (TOP VIEW)



B	0.6 ± 0.1
E	2.4 ± 0.1
F	4.43 ± 0.1

RECOMMENDED PAD LAYOUT (MM)



* The recommended distance to the PCB Ground Plane is 0.254 mm (0.010")

** PCB: Taconic Orcon RF-35P

EVB P/N: JIG544-7084

Thin-Film RF/Microwave Filters

BP2816 8W Band Pass Filter

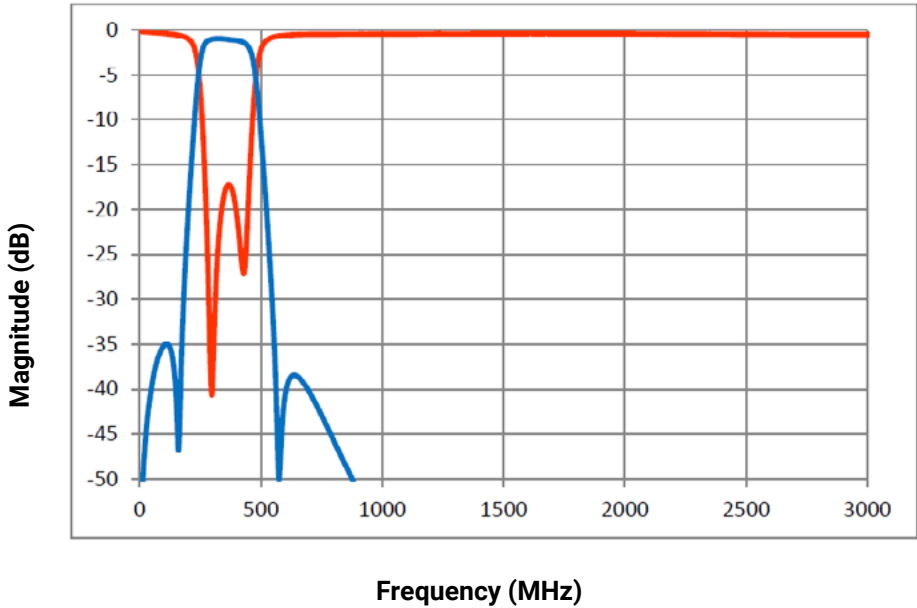
BP2816A0350SNTR



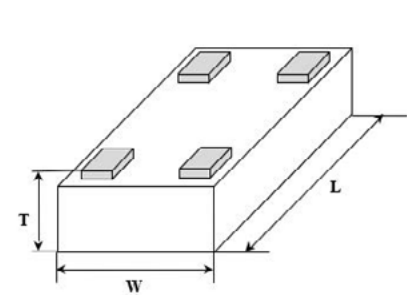
ELECTRICAL CHARACTERISTICS

Description	Value
Center frequency	350 MHz
Impedance	50 ohm
I. loss 280 - 420 MHz	-1.5 dB
In-band return loss	-15 dB
Rejection @ 160 MHz	-35 dB
Rejection @ 600 - 1000 MHz	-35 dB
Rejection @ 1000 - 2500MHz	-45 dB
Power handling (CW)	8 Watt
Operating temperature range	-40/+85 °C
Package	2816

TYPICAL ELECTRICAL PERFORMANCE



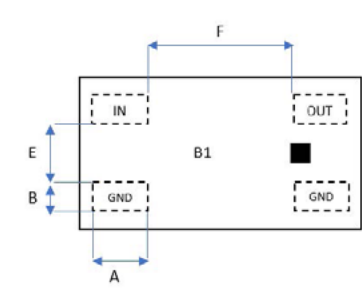
DIMENSIONS (BOTTOM VIEW)



mm (inches)

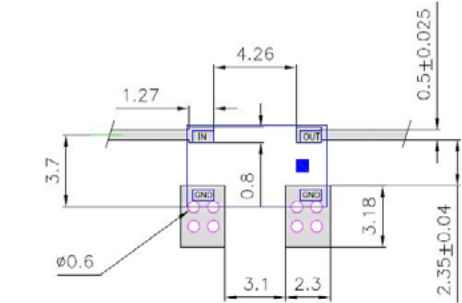
L	7.2 ± 0.3
W	4.2 ± 0.2
T	1.2 max
A	1.1 ± 0.1

TERMINALS (TOP VIEW)



B	0.6 ± 0.1
E	2.4 ± 0.1
F	4.43 ± 0.1

RECOMMENDED PAD LAYOUT (MM)



* The recommended distance to the PCB Ground Plane is 0.254 mm (0.010")

** PCB: Taconic Orcon RF-35P

EVB P/N: JIG544-7084

Thin-Film RF/Microwave Filters

BP2816 8W Band Pass Filter

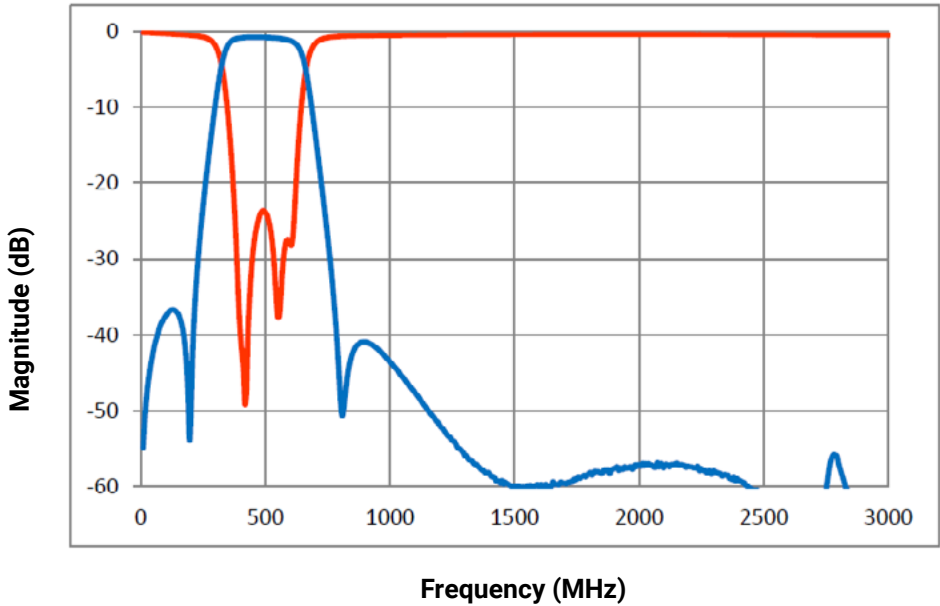
BP2816A0480SNTR



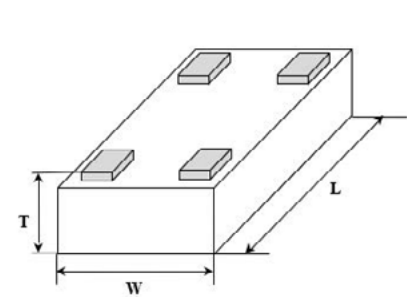
ELECTRICAL CHARACTERISTICS

Description	Value
Center frequency	480 MHz
Impedance	50 ohm
I. loss 370 - 590 MHz	-1.3 dB
In-band return loss	-15 dB
Rejection @ 200 MHz	-40 dB
Rejection @ 800 - 1500 MHz	-38 dB
Rejection @ 1501 - 3000 MHz	-45 dB
Power handling (CW)	8 Watt
Operating temperature range	-40/+85 °C
Package	2816

TYPICAL ELECTRICAL PERFORMANCE



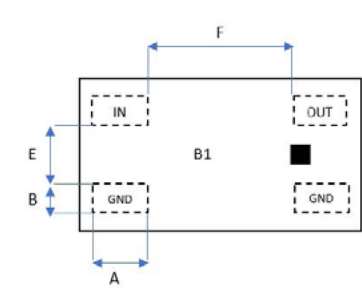
DIMENSIONS (BOTTOM VIEW)



mm (inches)

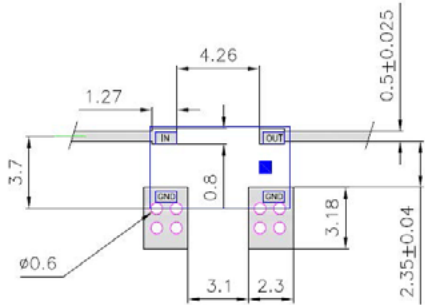
L	7.2 ± 0.3
W	4.2 ± 0.2
T	1.2 max
A	1.1 ± 0.1

TERMINALS (TOP VIEW)



B	0.6 ± 0.1
E	2.4 ± 0.1
F	4.43 ± 0.1

RECOMMENDED PAD LAYOUT (MM)



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** PCB: Taconic Orcer RF-35P

EVB P/N: JIG544-7084

Thin-Film RF/Microwave Filters

BP2816 8W Band Pass Filter

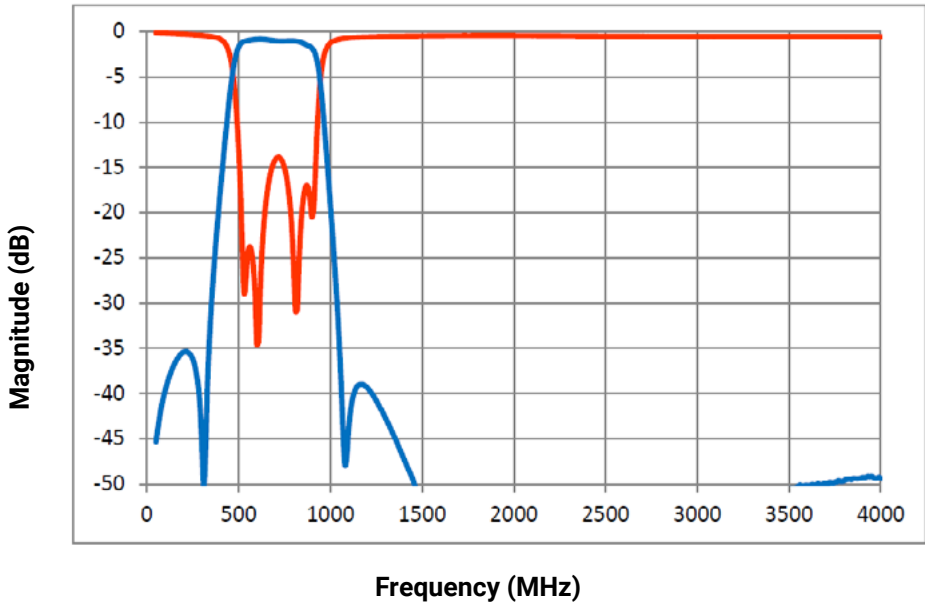
BP2816A0660SNTR



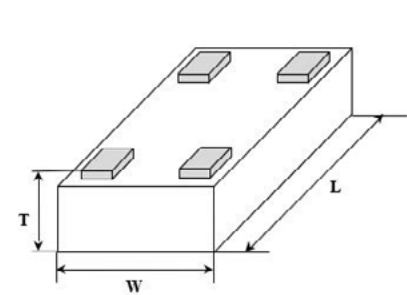
ELECTRICAL CHARACTERISTICS

Description	Value
Center frequency	660 MHz
Impedance	50 ohm
I. loss 520 - 800 MHz	-1.4 dB
In-band return loss	-12 dB
Rejection @ 330 MHz	-40 dB
Rejection @ 1.1 – 1.68 GHz	-35 dB
Rejection @ 1.69 – 2.52 GHz	-37 dB
Power handling (CW)	8 Watt
Operating temperature range	-40/+85 °C
Package	2816

TYPICAL ELECTRICAL PERFORMANCE



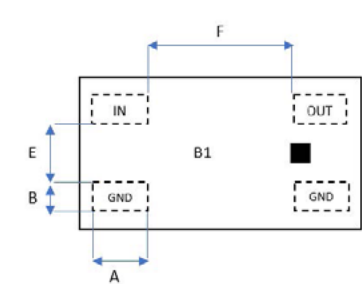
DIMENSIONS (BOTTOM VIEW)



mm (inches)

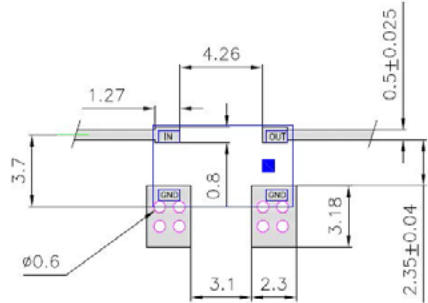
L	7.2 ± 0.3
W	4.2 ± 0.2
T	1.2 max
A	1.1 ± 0.1

TERMINALS (TOP VIEW)



B	0.6 ± 0.1
E	2.4 ± 0.1
F	4.43 ± 0.1

RECOMMENDED PAD LAYOUT (MM)



* The recommended distance to the PCB Ground Plane is 0.254 mm (0.010")
 ** PCB: Taconic Orcon RF-35P

EVB P/N: JIG544-7084

Thin-Film RF/Microwave Filters

BP2816 8W Band Pass Filter

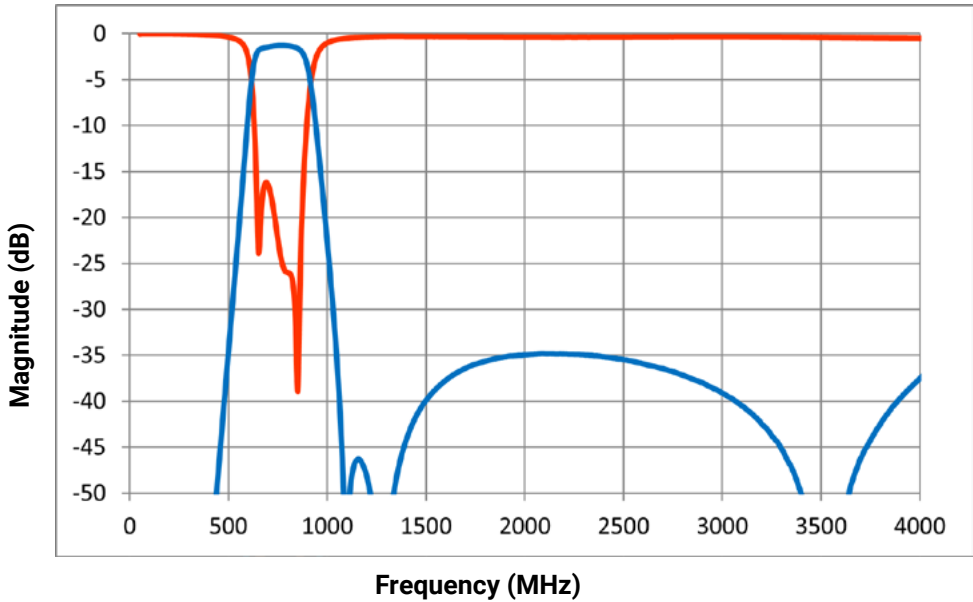
BP2816A0768SNTR



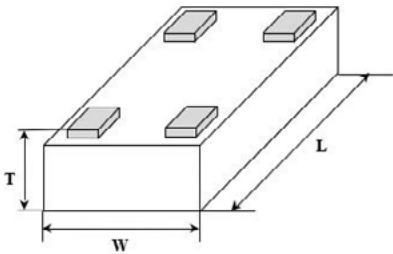
ELECTRICAL CHARACTERISTICS

Description	Value
Center frequency	768 MHz
Impedance	50 ohm
I. loss 668 - 868 MHz	-2.5 dB
In-band return loss	-15 dB
Rejection @ 500 MHz	-30 dB
Rejection @ 1100 - 4000 MHz	-35 dB
Power handling (CW)	8 Watt
Operating temperature range	-40/+85 °C
Package	2816

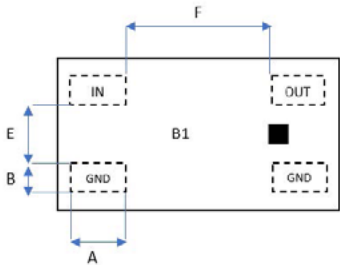
TYPICAL ELECTRICAL PERFORMANCE



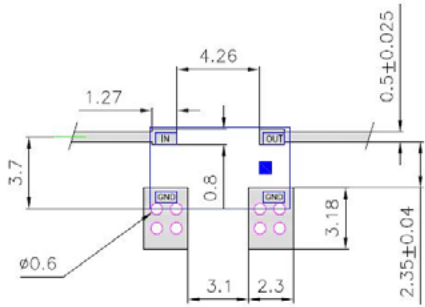
DIMENSIONS (BOTTOM VIEW)



TERMINALS (TOP VIEW)



RECOMMENDED PAD LAYOUT (MM)



mm (inches)

L	7.2 ± 0.3
W	4.2 ± 0.2
T	1.2 max
A	1.1 ± 0.1

B	0.6 ± 0.1
E	2.4 ± 0.1
F	4.43 ± 0.1

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** PCB: Taconic Orcon RF-35P

EVB P/N: JIG544-7084

Thin-Film RF/Microwave Filters

BP2816 8W Band Pass Filter

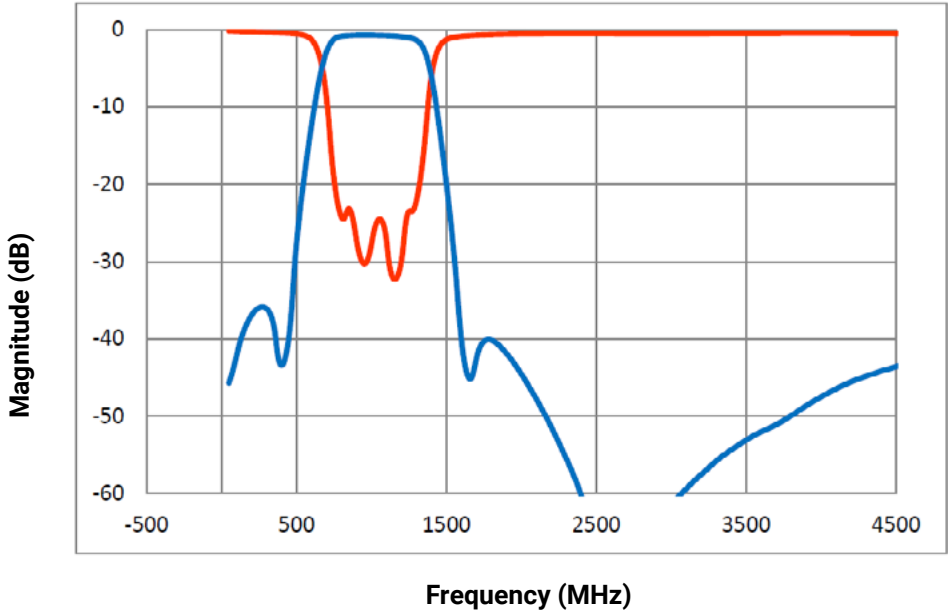
BP2816A1010SNTR



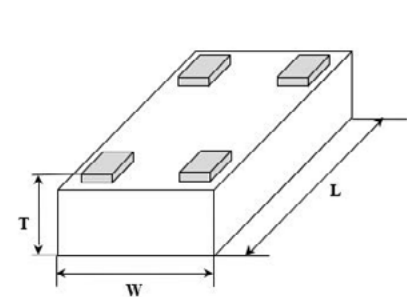
ELECTRICAL CHARACTERISTICS

Description	Value
Center frequency	1010 MHz
Impedance	50 ohm
I. loss 760 - 1260 MHz	-1.3 dB
In-band return loss	-15 dB
Rejection @ 450 MHz	-33 dB
Rejection @ 1.6 – 2.0 GHz	-35 dB
Rejection @ 2.0 – 4.5 GHz	-40 dB
Power handling (CW)	8 Watt
Operating temperature range	-40/+85 °C
Package	2816

TYPICAL ELECTRICAL PERFORMANCE

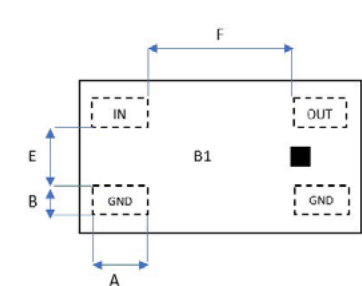


DIMENSIONS (BOTTOM VIEW)



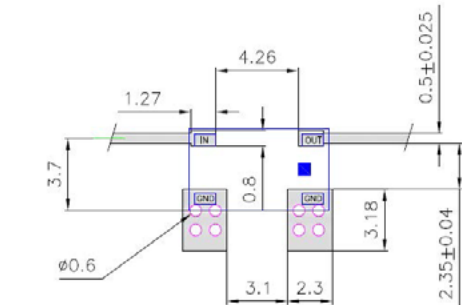
mm (inches)	
L	7.2 ± 0.3
W	4.2 ± 0.2
T	1.2 max
A	1.1 ± 0.1

TERMINALS (TOP VIEW)



B	0.6 ± 0.1
E	2.4 ± 0.1
F	4.43 ± 0.1

RECOMMENDED PAD LAYOUT (MM)



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 ** PCB: Taconic Orcon RF-35P

EVB P/N: JIG544-7084