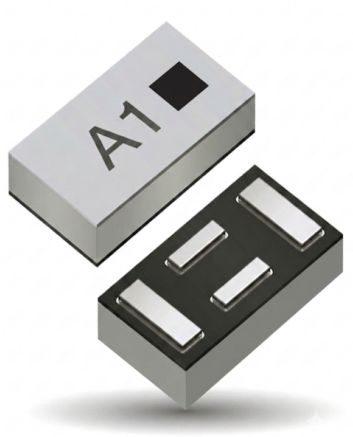
High Performance Low Pass Filters

2816 High Performance Low Pass 20W

Thin-Film RF/Microwave Filters

2816 High Performance Low Pass 20W

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: 7x1.4x1.2mm (LxWxT)
- Frequency: 400-2500 MHz
- Steep Attenuation
- Characteristic Impedance: 50Ω
- Storage Temperature: -55℃ ÷ +85 ℃
- Low Profile
- Rugged Construction
- Taped and Reeled
- RoHS Complied

APPLICATIONS

- Mobile Communications
- Satellite TV Receivers
- GPS
- Vehicle Location Systems
- Wireless LAN's

HOW TO ORDER

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

N = Nickel/Lead-Free Solder Coated (Sn100), LGA
L = Nickel/Solder Coated (Sn90, Pb10), LGA

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT

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:

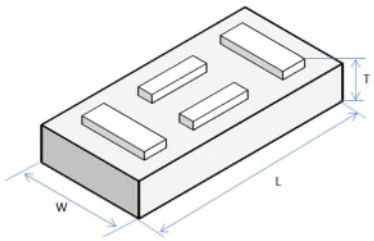
- Static Humidity: 85°C, 85% RH, 160 hours
- Endurance : 125°C, IR, 4 hours

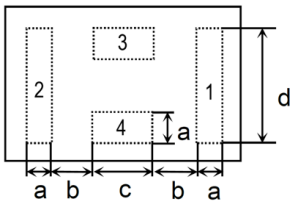
TERMINATION

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

DIMENSIONS (BOTTOM VIEW)

mm (inches)





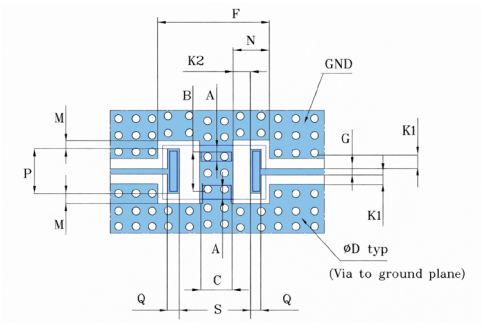
1: **In**, 2: **Out**, 3-4: **GND**

L	7.2±0.3 (0.28±0.01)
W	4.2±0.2 (0.165±0.008)
T	1.2 max (0.047 max)

a	0.06±0.15 (0.024±0.006)
b	1.40±0.15 (0.055±0.006)
c	2.00±0.15 (0.079±0.006)
d	3.00±0.15 (0.118±0.006)

RECOMMENDED PAD LAYOUT

**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*



mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

ELECTRICAL SPECIFICATION

Part Number	Fc [MHz]	I.L [dB]	R.L.[dB]	Rejection [dB]	Rejection [dB]	Rejection [dB]
LP2816A0340SNTR	340	-1.3	-15	-30 dB @ 450 - 2000 MHz	----	----
LP2816A0400SNTR	400	-0.85	-18	-35 dB @ 600 - 1000 MHz	-45 dB @ 1001 - 3000 MHz	----
LP2816A0500SNTR	500	-0.9	-18	-35 dB @ 1000 MHz	-40 dB @ 1500 - 2500 MHz	----
LP2816A0512SNTR	512	-0.85	-18	-40 dB @ 720 MHz	-35 dB @ 1024 MHz	-50dB @ 1500 - 2500 MHz
LP2816A0520SNTR	520	-0.95	-18	-35 dB @ 1040 MHz	-40 dB @ 1500 - 2500 MHz	----
LP2816A0570SNTR	570	-0.85	-18	-35 dB @ 1140 MHz	-40 dB @ 1500 - 2500 MHz	----
LP2816A0600SNTR	600	-0.85	-18	-35 dB @ 1200 MHz	-40 dB @ 1500 - 2500 MHz	----
LP2816A0680SNTR	680	-0.7	-23	-36 dB @ 950 MHz	-40 dB @ 1360 - 2500 MHz	----
LP2816A0800SNTR	800	-0.65	-12	-30 dB @1300 - 3000 MHz	----	----
LP2816A0900SNTR	900	-0.7	-12	-33 dB @1500 - 3000 MHz	----	----
LP2816A0980SNTR	980	-0.7	-23	-40 dB @1804 - 1856 MHz	-40 dB @ 2706 - 2784 MHz	----
LP2816A1000SNTR	1000	-0.8	-15	-35 dB @1500 - 3000 MHz	----	----
LP2816A1250SNTR	1250	-3.5	-12	-30 dB @1500 - 3000 MHz	----	----
LP2816A1300SNTR	1300	-0.85	-15	-40 dB @ 2000 - 7000 MHz	----	----
LP2816A1400SNTR	1400	-0.75	-15	-35 dB @ 1960 MHz	-40 dB @ 2100 - 6000 MHz	-30 dB @ 6001 - 9000 MHz
LP2816A1500SNTR	1500	-0.75	-15	-40 dB @ 2100 - 6000 MHz	----	----
LP2816A1600SNTR	1600	-0.8	-20	-40 dB @ 2240 - 7500 MHz	-35 dB @ 7501-10000 MHz	----
LP2816A1700SNTR	1700	-0.85	-14	-30 dB @ 2380 MHz	-40 dB @ 2500 - 7000 MHz	-30 dB @ 7001 - 10000 MHz
LP2816A1800SNTR	1800	-0.75	-20	-40 dB @ 2800 - 8500 MHz	-35 dB @ 8501 - 10000 MHz	---
LP2816A1900SNTR	1900	-0.8	-23	-35 dB @ 2660 MHz	-40 dB @ 3000 - 10000 MHz	---
LP2816A2500SNTR	2500	-0.8	-15	-35 dB @ 3500 MHz	-45 dB @ 5400 - 7500 MHz	---

Thin-Film RF/Microwave Filters

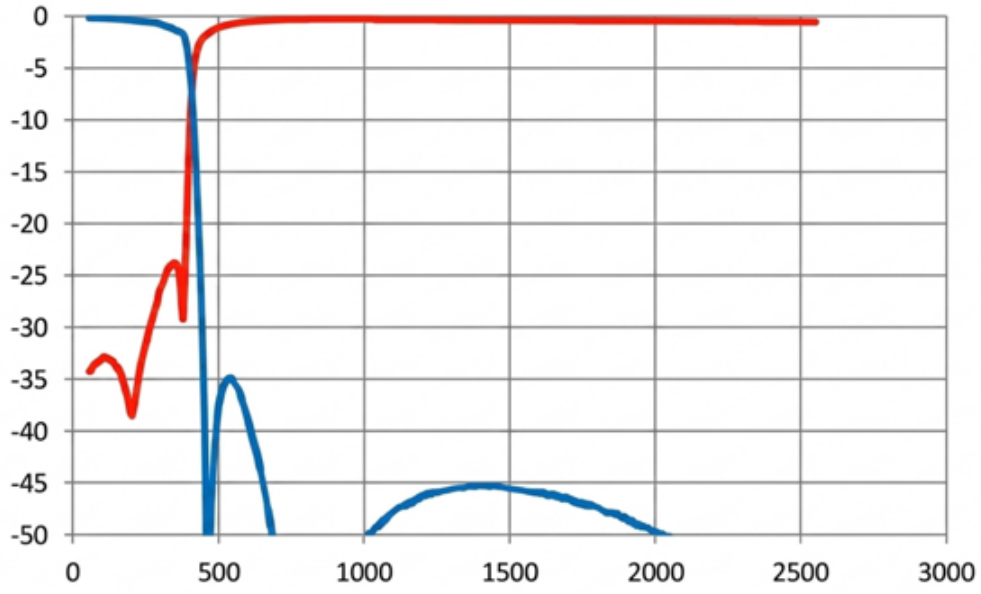
2816 High Performance Low Pass 20W

LP2816A0340SNTR

ELECTRICAL SPECIFICATIONS TABLE

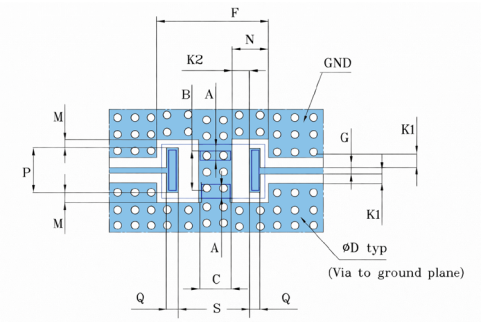
LP2816A0340SNTR		
Parameter	**Value**	**Notes**
Fc	340 MHz	
Insertion Loss @ 340 MHz	-1.3 dB	
Return Loss @ 340 MHz	-15 dB	
Rejection @ 0.45-2.0 GHz	-30 dB	
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

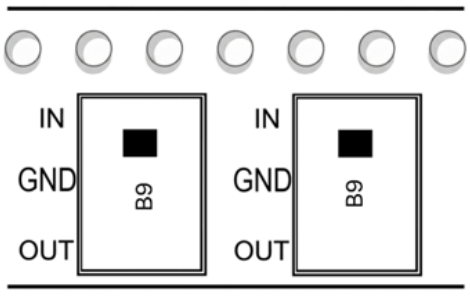
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

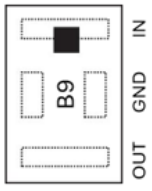


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

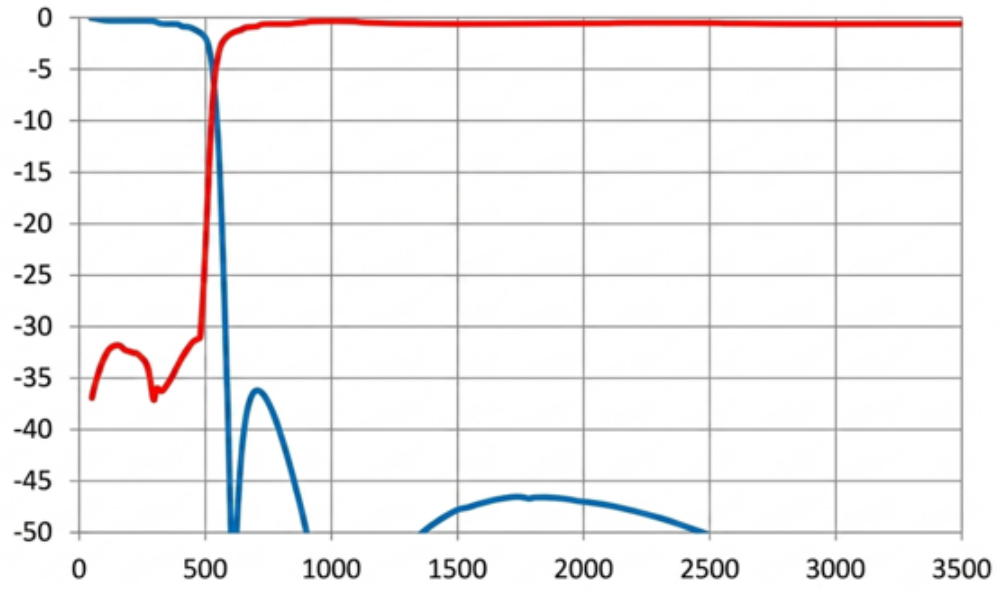
2816 High Performance Low Pass 20W

LP2816A0400SNTR

ELECTRICAL SPECIFICATIONS TABLE

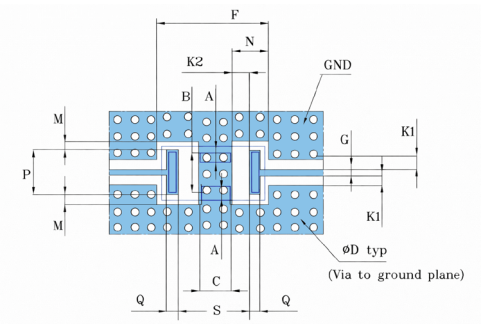
LP2816A0400SNTR		
Parameter	**Value**	**Notes**
Fc	400 MHz	
Insertion Loss @ 400 MHz	-0.85 dB	
Return Loss @ 400 MHz	-18 dB	
Rejection @ 600-1000 MHz	-35 dB	
Rejection @ 1001-3000 MHz	-45 dB	
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

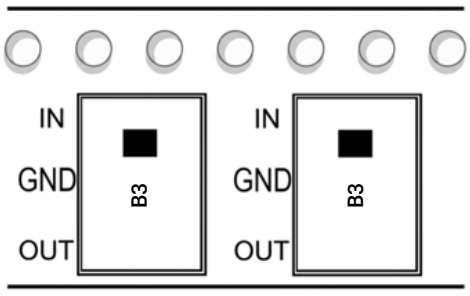
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

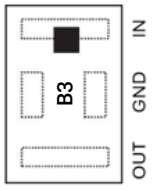


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL



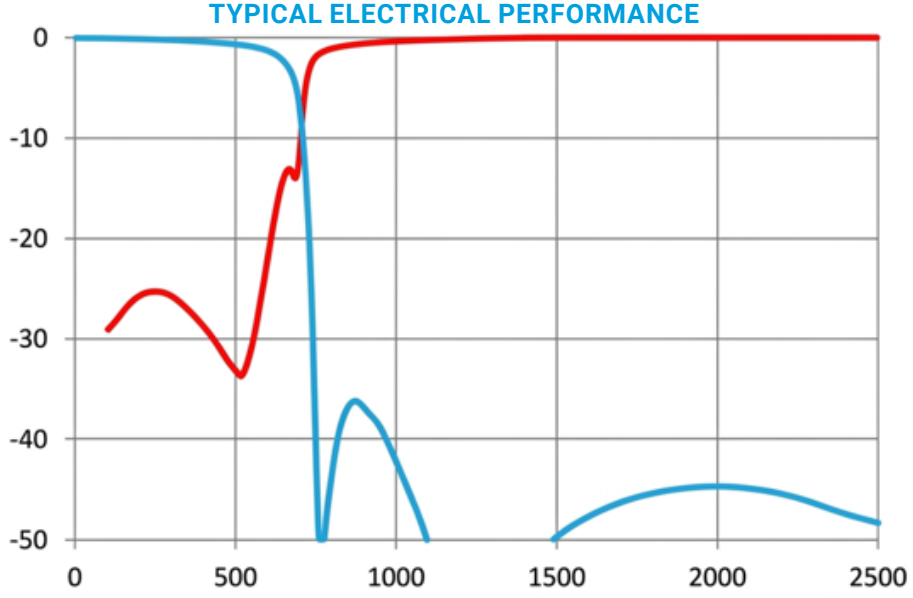


The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

ELECTRICAL SPECIFICATIONS TABLE

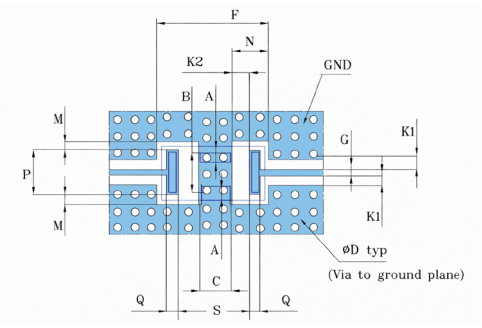
LP2816A0500SNTR		
Parameter	**Value**	**Notes**
Fc	500 MHz	
Insertion Loss @ 500 MHz	-0.9 dB	Max.
Return Loss @ 500 MHz	-18 dB	
Rejection @ 1000 MHz	-35 dB	Min.
Rejection @ 1500-2500 MHz	-40 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

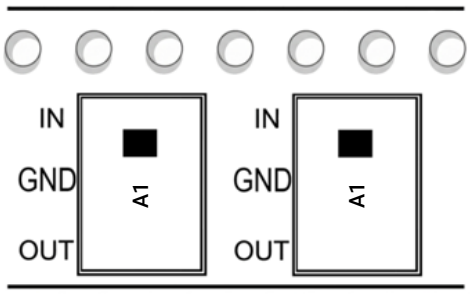
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

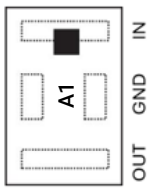


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

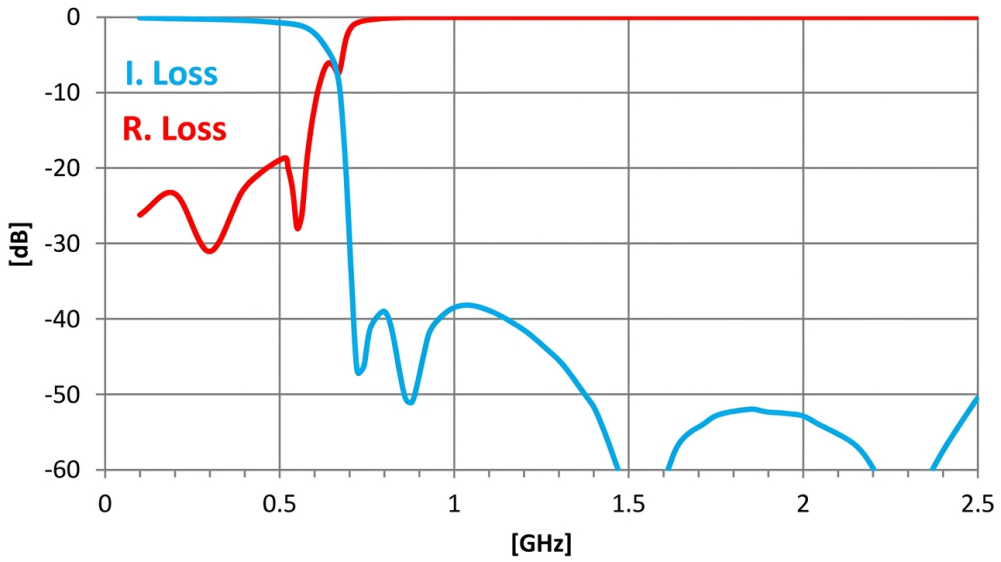
2816 High Performance Low Pass 20W

LP2816A0512SNTR

ELECTRICAL SPECIFICATIONS TABLE

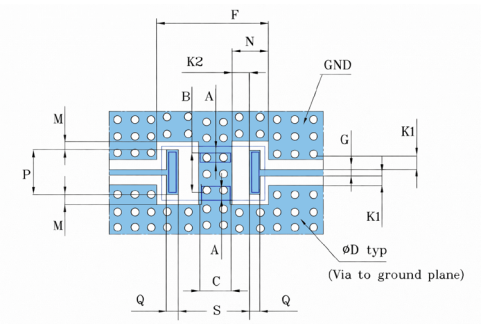
LP2816A0512SNTR		
Parameter	**Value**	**Notes**
Fc	512 MHz	
Insertion Loss @ 512 MHz	-0.85 dB	Max.
Return Loss @ 512 MHz	-18 dB	
Rejection @ 720 MHz	-40 dB	Min.
Rejection @ 1024 MHz	-35 dB	Min.
Rejection @ 1500-2500 MHz	-50 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

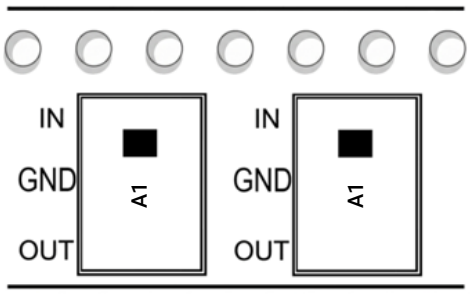
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

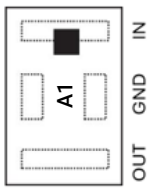


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL



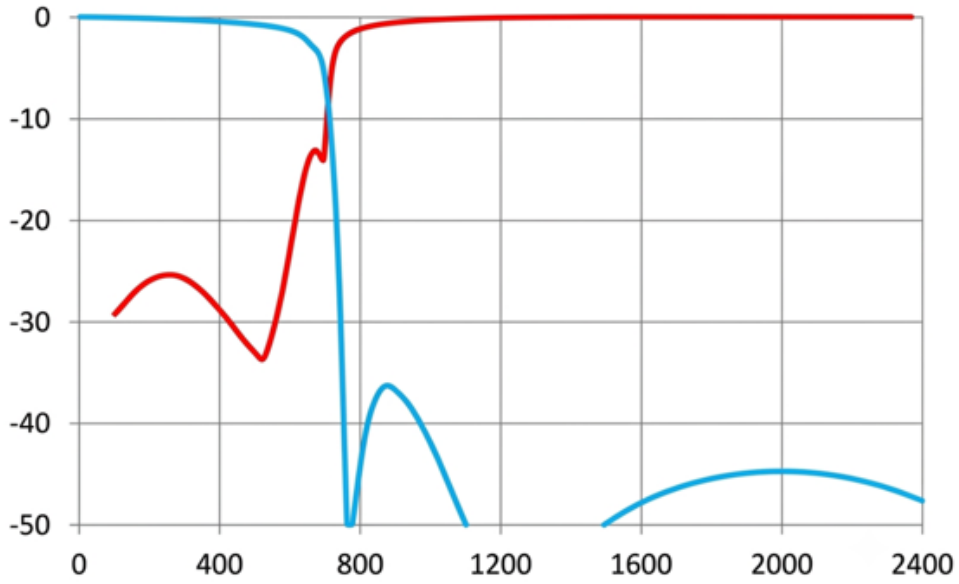


The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

ELECTRICAL SPECIFICATIONS TABLE

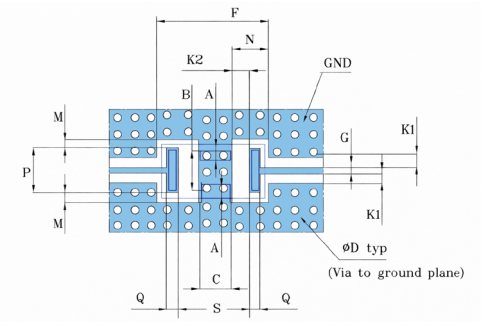
LP2816A0520SNTR		
Parameter	**Value**	**Notes**
Fc	520 MHz	
Insertion Loss @ 520 MHz	-0.95 dB	Max.
Return Loss @ 520 MHz	-18 dB	
Rejection @ 1040 MHz	-35 dB	Min.
Rejection @ 1500-2000 MHz	-40 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

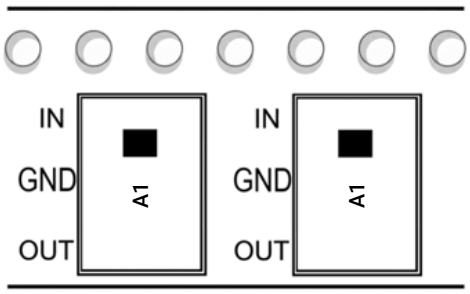
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

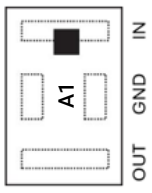


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

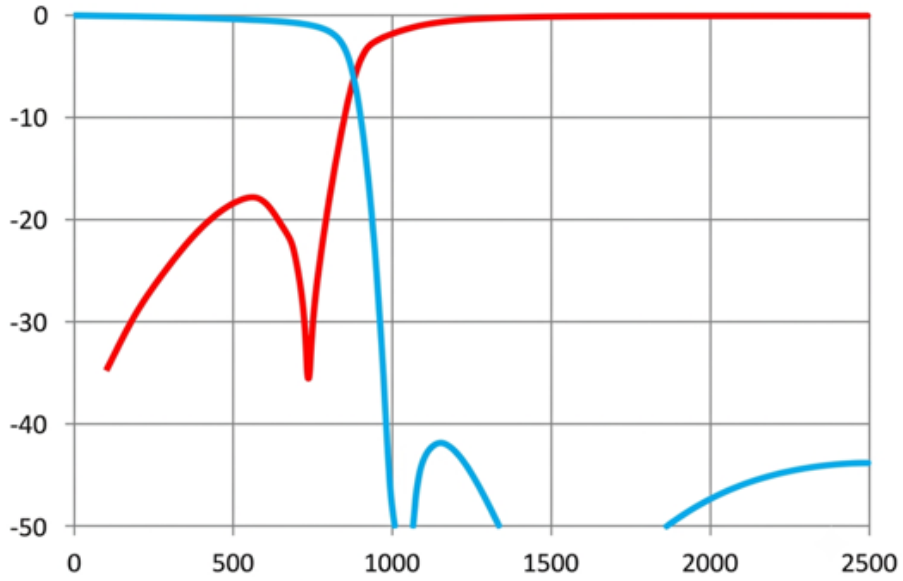
2816 High Performance Low Pass 20W

LP2816A0570SNTR

ELECTRICAL SPECIFICATIONS

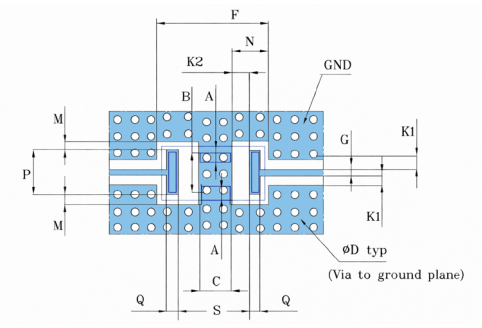
LP2816A0570SNTR		
Parameter	**Value**	**Notes**
Fc	570 MHz	
Insertion Loss @ 570 MHz	-0.85 dB	Max.
Return Loss @ 570 MHz	-18 dB	
Rejection @ 1140 MHz	-35 dB	Min.
Rejection @ 1500-2500 MHz	-40 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

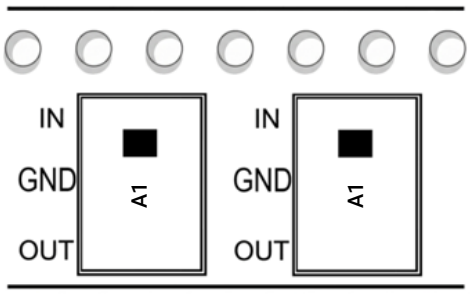
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

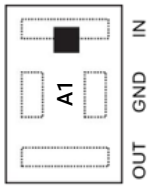


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL



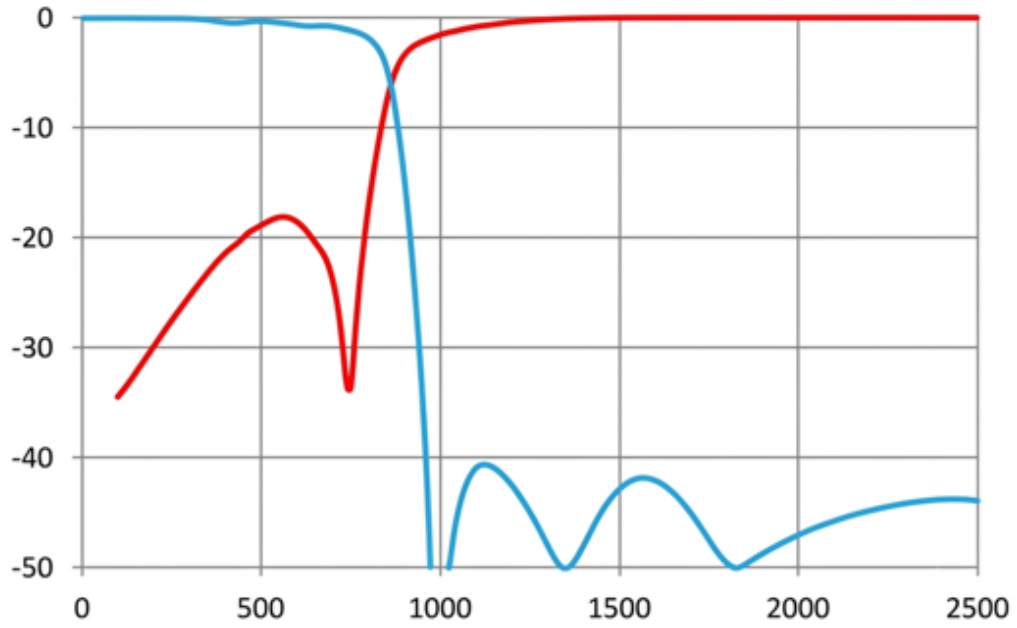


The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

ELECTRICAL SPECIFICATIONS

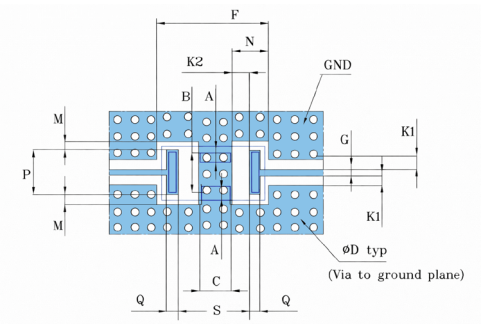
LP2816A0600SNTR		
Parameter	**Value**	**Notes**
Fc	600 MHz	
Insertion Loss @ 600 MHz	-0.85 dB	Max.
Return Loss @ 600 MHz	-18 dB	
Rejection @ 1200 MHz	-35 dB	Min.
Rejection @ 1500-2500 MHz	-40 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

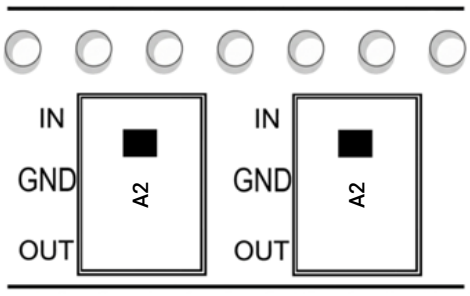
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

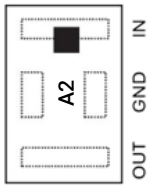


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

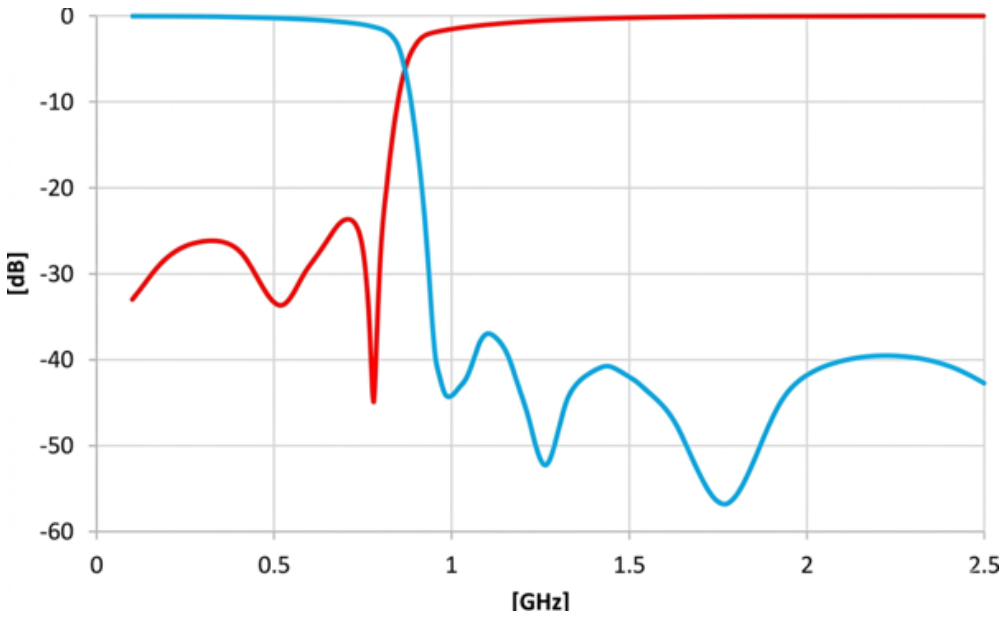
2816 High Performance Low Pass 20W

LP2816A0680SNTR

ELECTRICAL SPECIFICATIONS

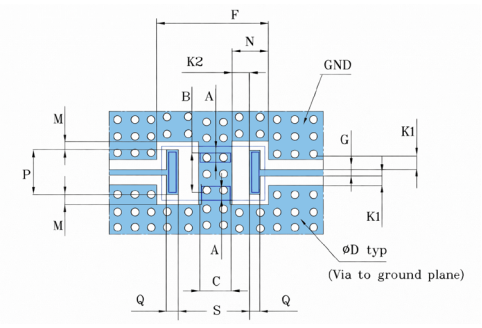
LP2816A0680SNTR		
Parameter	**Value**	**Notes**
Fc	680 MHz	
Insertion Loss @ 680 MHz	-0.7 dB	Max.
Return Loss @ 680 MHz	-23 dB	
Rejection @ 950 MHz	-36 dB	Min.
Rejection @ 1.36-2.5 GHz	-40 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

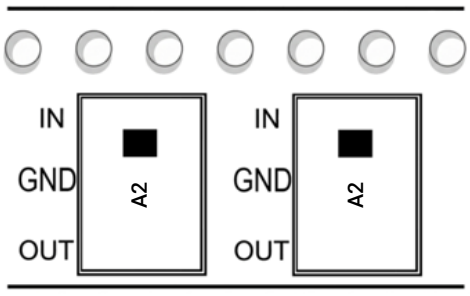
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

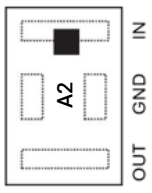


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

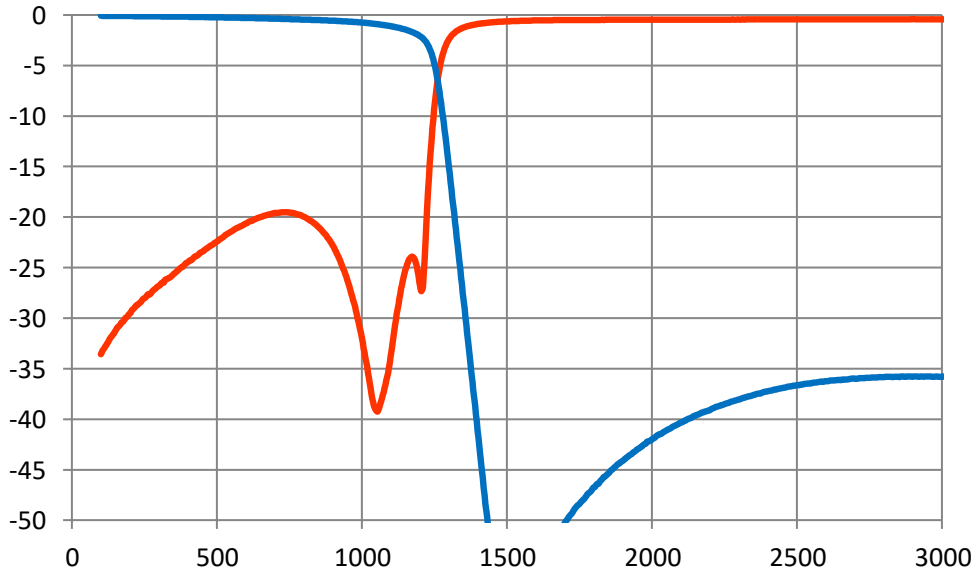
2816 High Performance Low Pass 20W

LP2816A0800SNTR

ELECTRICAL SPECIFICATIONS

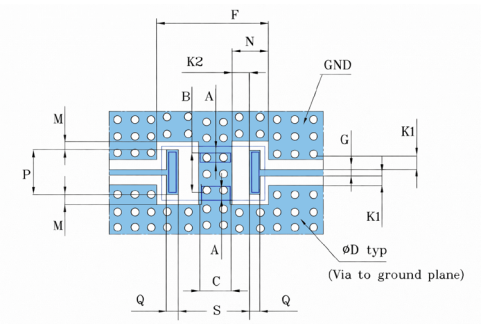
LP2816A0800SNTR		
Parameter	**Value**	**Notes**
Fc	800 MHz	
Insertion Loss @ 800 MHz	-0.65 dB	
Return Loss @ 800 MHz	-12 dB	
Rejection @ 1300-3000 MHz	-30 dB	
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

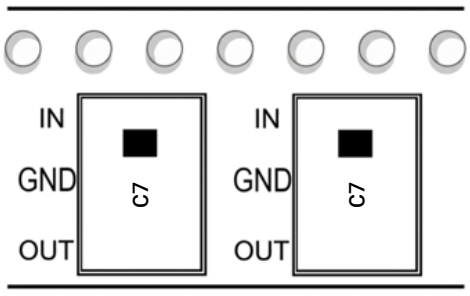
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

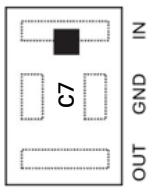


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

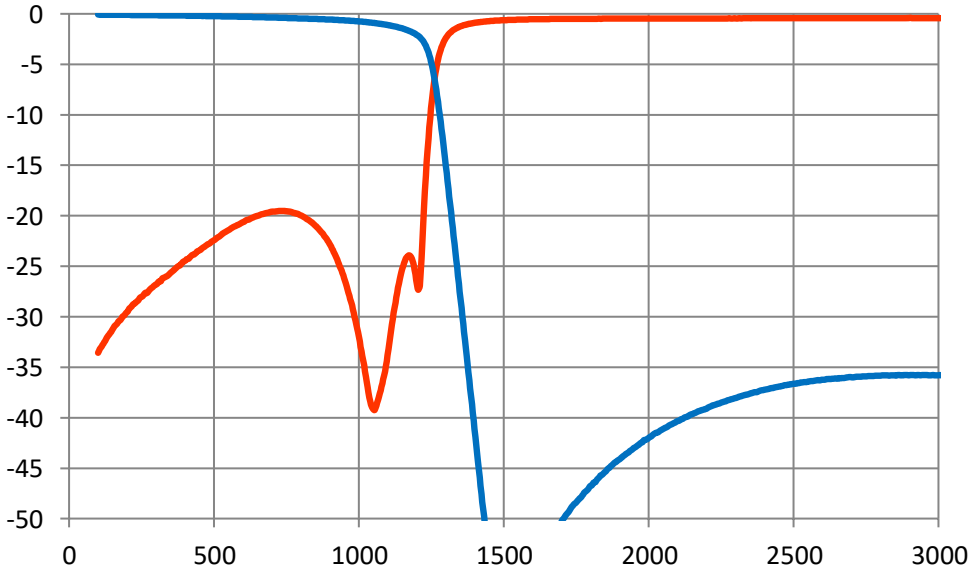
2816 High Performance Low Pass 20W

LP2816A0900SNTR

ELECTRICAL SPECIFICATIONS

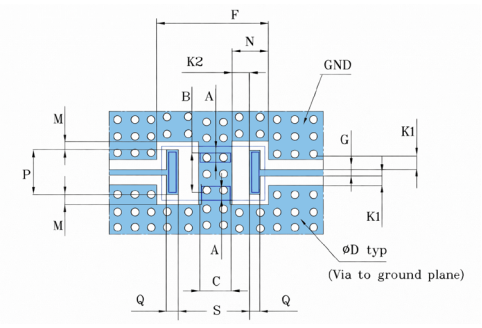
LP2816A0900SNTR		
Parameter	**Value**	**Notes**
Fc	900 MHz	
Insertion Loss @ 900 MHz	-0.7 dB	
Return Loss @ 900 MHz	-12 dB	
Rejection @ 1500-3000 MHz	-33 dB	
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

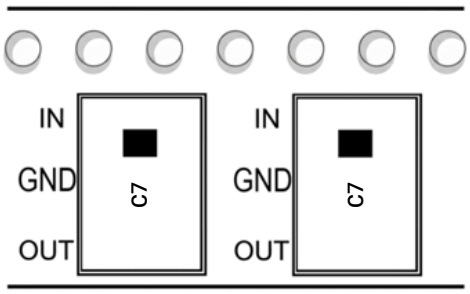
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

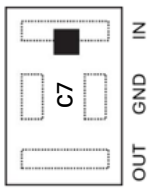


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

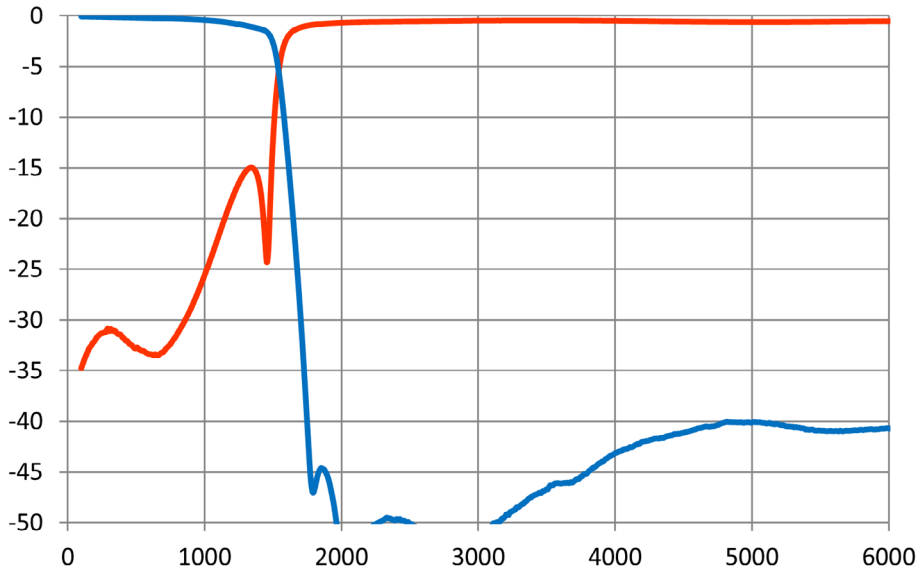
2816 High Performance Low Pass 20W

LP2816A0980SNTR

ELECTRICAL SPECIFICATIONS

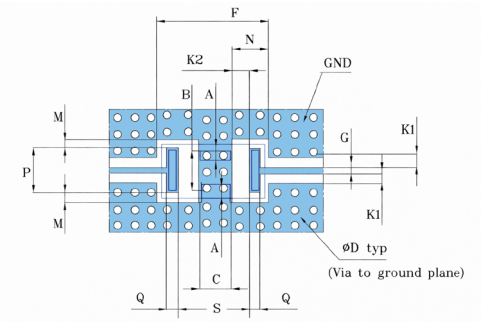
LP2816A0980SNTR		
Parameter	**Value**	**Notes**
Fc	980 MHz	
Insertion Loss @ 980 MHz	-0.7 dB	
Return Loss @ 980 MHz	-23 dB	
Rejection @ 1804-1856 MHz	-40 dB	
Rejection @ 2706-2784 MHz	-40 dB	
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

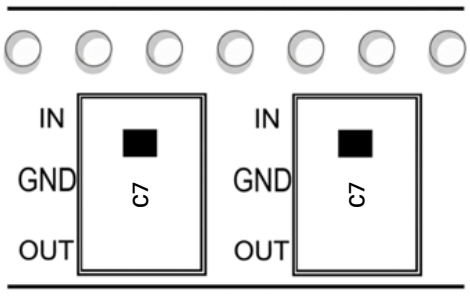
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

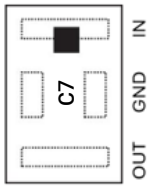


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

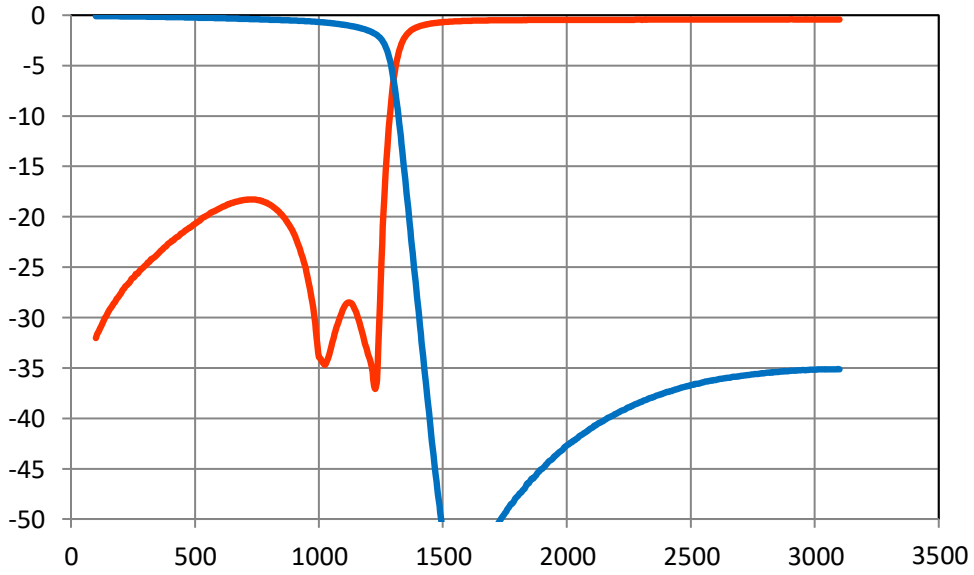
2816 High Performance Low Pass 20W

LP2816A1000SNTR

ELECTRICAL SPECIFICATIONS

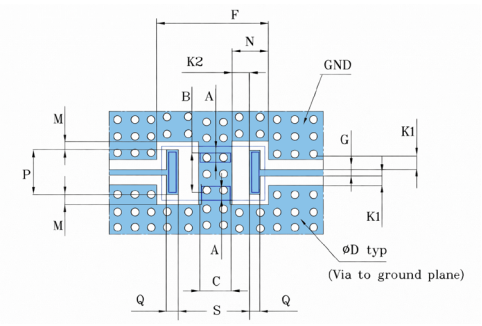
LP2816A1000SNTR		
Parameter	**Value**	**Notes**
Fc	1000 MHz	
Insertion Loss @ 1000 MHz	-0.8 dB	
Return Loss @ 1000 MHz	-15 dB	
Rejection @ 1500-3000 MHz	-35 dB	
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

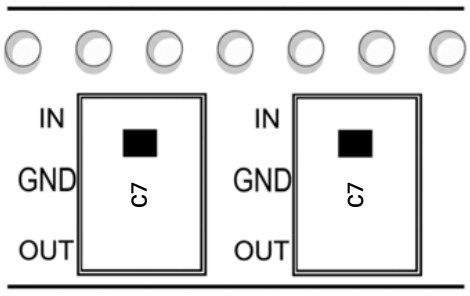
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

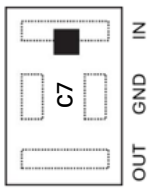


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

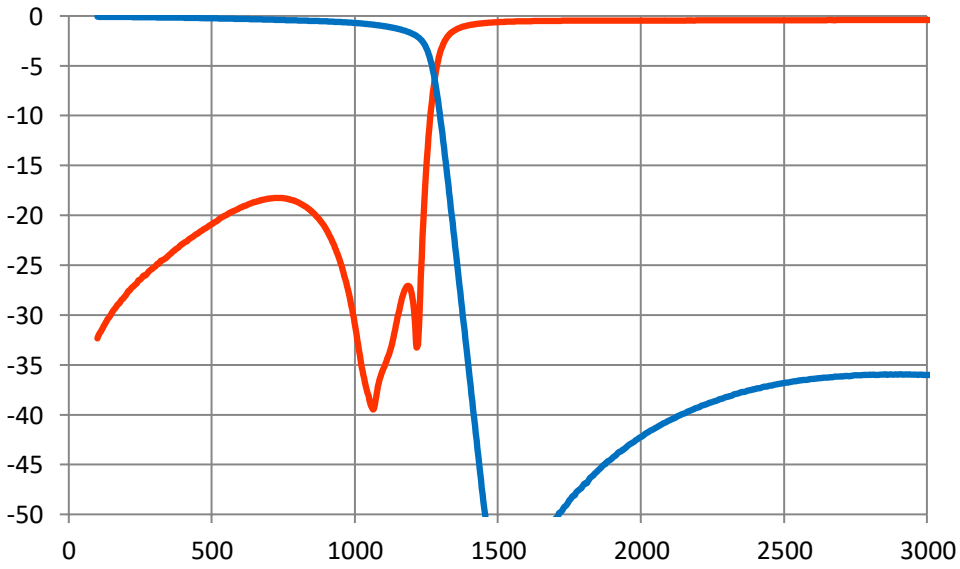
2816 High Performance Low Pass 20W

LP2816A1250SNTR

ELECTRICAL SPECIFICATIONS

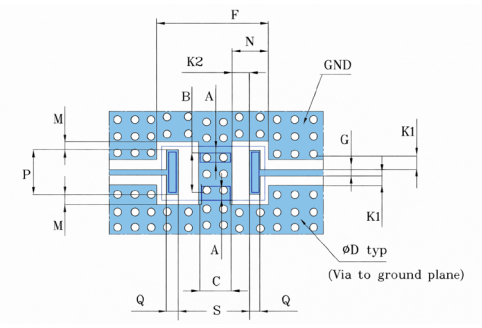
LP2816A1250SNTR		
Parameter	**Value**	**Notes**
Fc	1250 MHz	
Insertion Loss @ 1250 MHz	-3.5 dB	
Return Loss @ 1250 MHz	-12 dB	
Rejection @ 1500-3000 MHz	-30 dB	
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

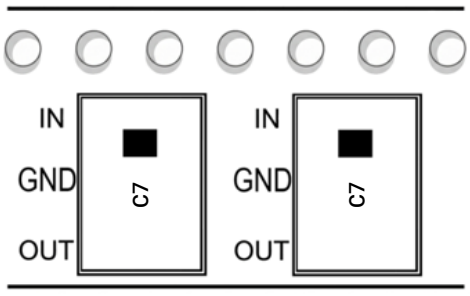
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

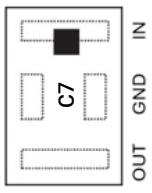


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

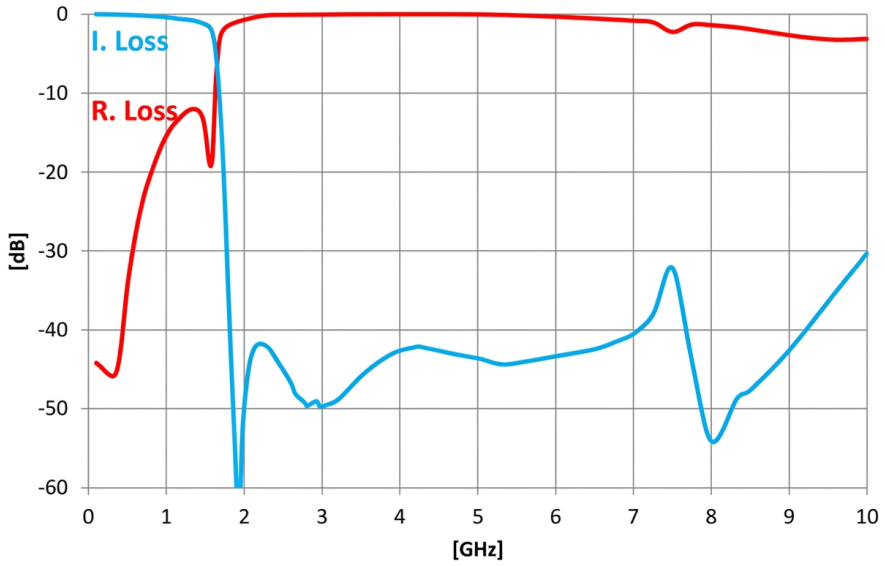
2816 High Performance Low Pass 20W

LP2816A1300SNTR

ELECTRICAL SPECIFICATIONS

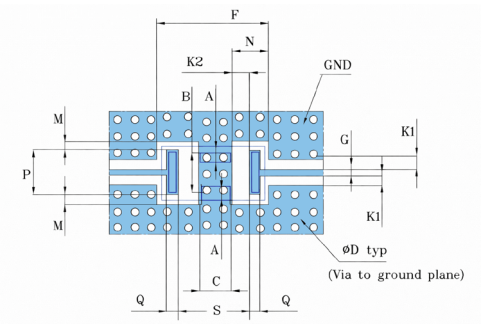
LP2816A1300SNTR		
Parameter	**Value**	**Notes**
Fc	1300 MHz	
Insertion Loss @ 1300 MHz	-0.85 dB	Max.
Return Loss @ 1300 MHz	-15 dB	Typ.
Rejection @ 2.0-7.0 GHz	-40 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

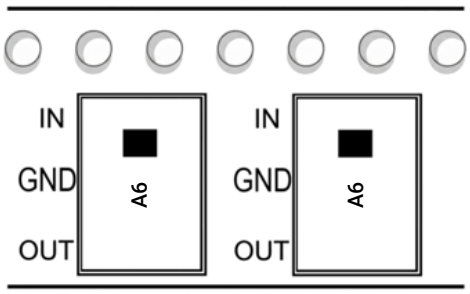
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

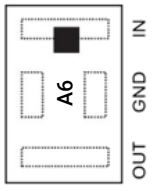


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





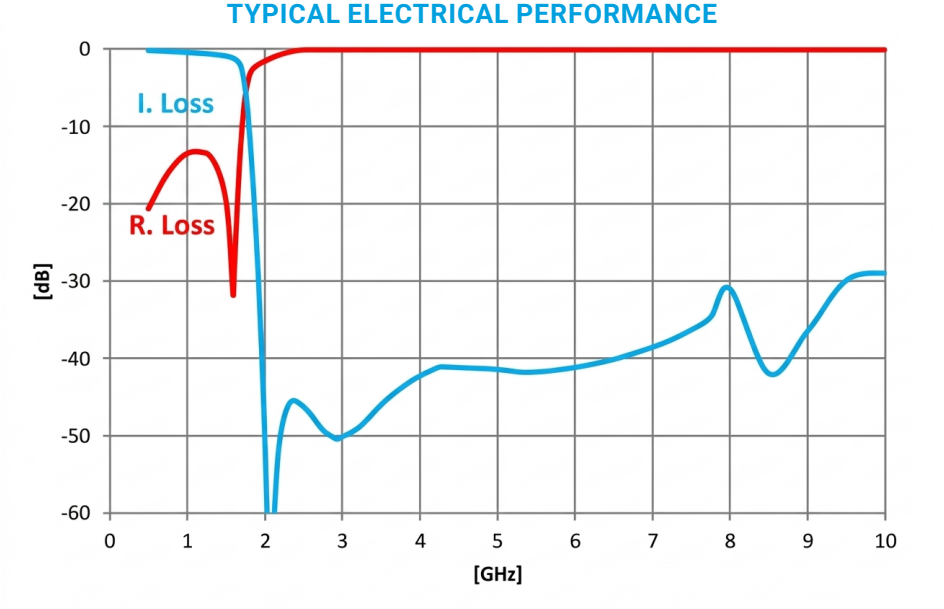
The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters
2816 High Performance Low Pass 20W
LP2816A1400SNTR

ELECTRICAL SPECIFICATIONS

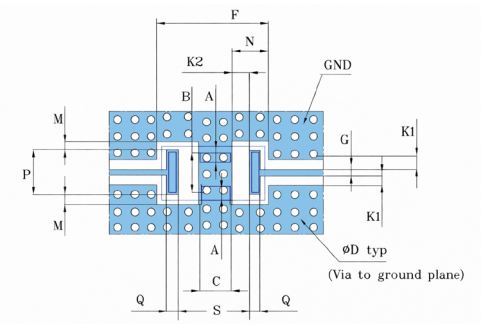
LP2816A1400SNTR		
Parameter	**Value**	**Notes**
Fc	1400 MHz	
Insertion Loss @ 1400 MHz	-0.75 dB	Max.
Return Loss @ 1400 MHz	-15 dB	
Rejection @ 1960 MHz	-35 dB	Min.
Rejection @ 2.1-6.0 GHz	-40 dB	Min.
Rejection @ 6001-9000 MHz	-30 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

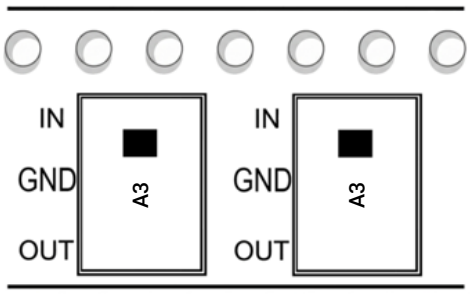
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

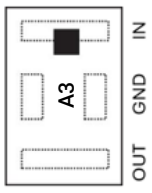


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





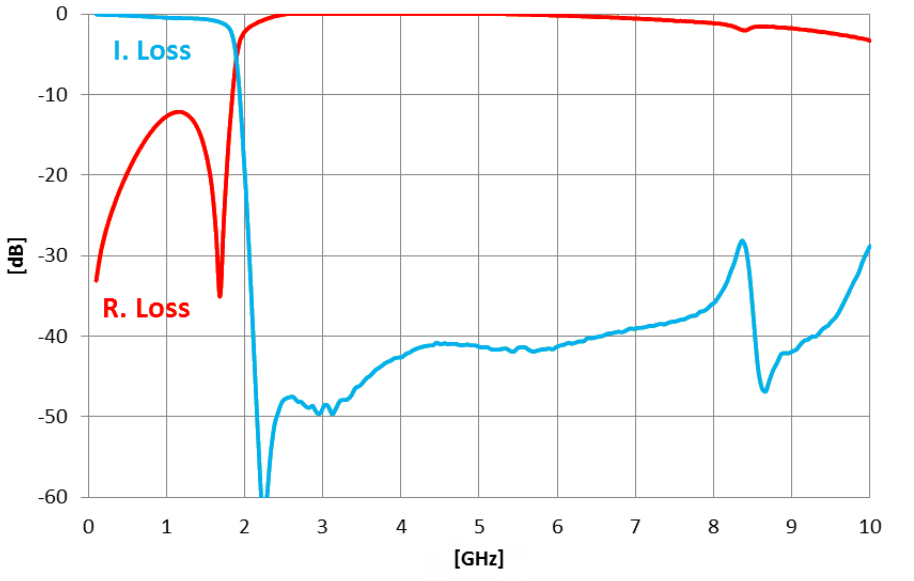
The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters
2816 High Performance Low Pass 20W
LP2816A1500SNTR

ELECTRICAL SPECIFICATIONS

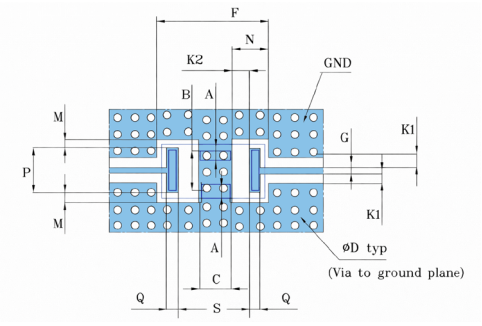
LP2816A1500SNTR		
Parameter	**Value**	**Notes**
Fc	1500 MHz	
Insertion Loss @ 1500 MHz	-0.75 dB	Max.
Return Loss @ 1500 MHz	-15 dB	
Rejection @ 2100-6000 MHz	-40 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

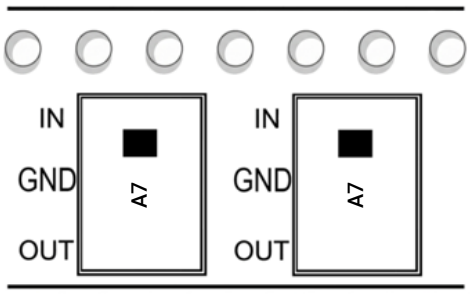
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

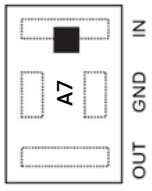


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





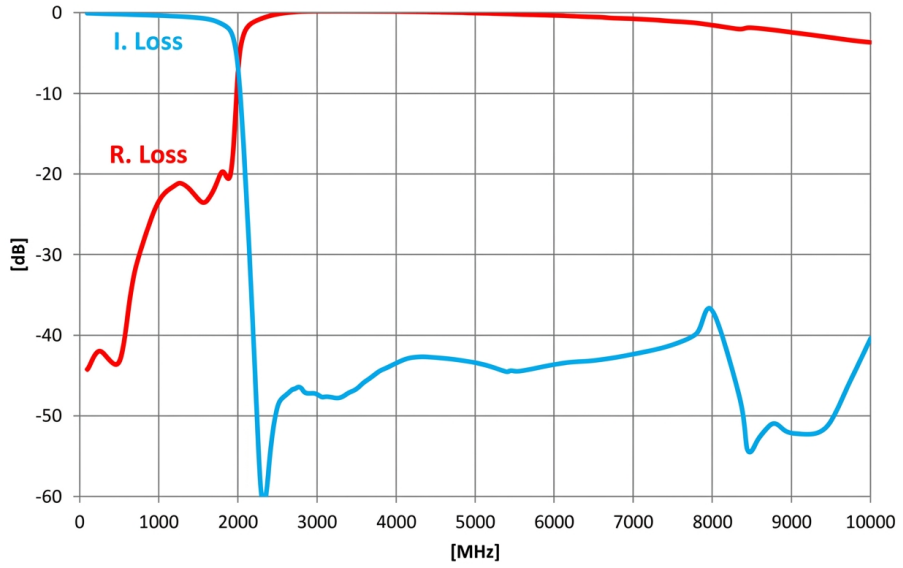
The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters
2816 High Performance Low Pass 20W
LP2816A1600SNTR

ELECTRICAL SPECIFICATIONS

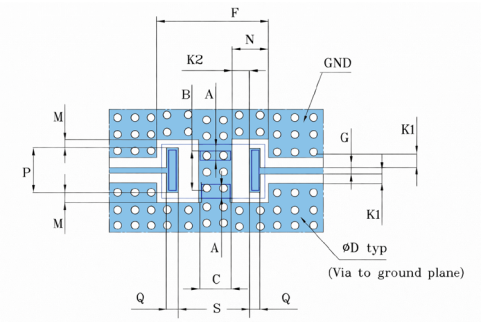
LP2816A1600SNTR		
Parameter	**Value**	**Notes**
Fc	1600 MHz	
Insertion Loss @ 1600 MHz	-0.8 dB	Max.
Return Loss @ 1600 MHz	-20 dB	Typ.
Rejection @ 2.24-7.5 GHz	-40 dB	Min.
Rejection @ 7501-10000 MHz	-35 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

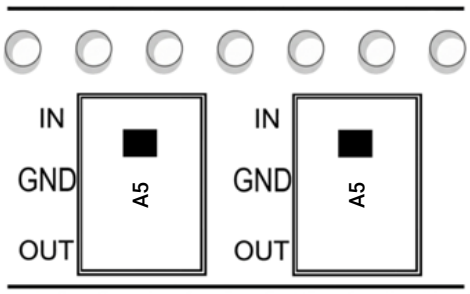
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

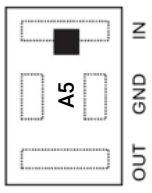


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

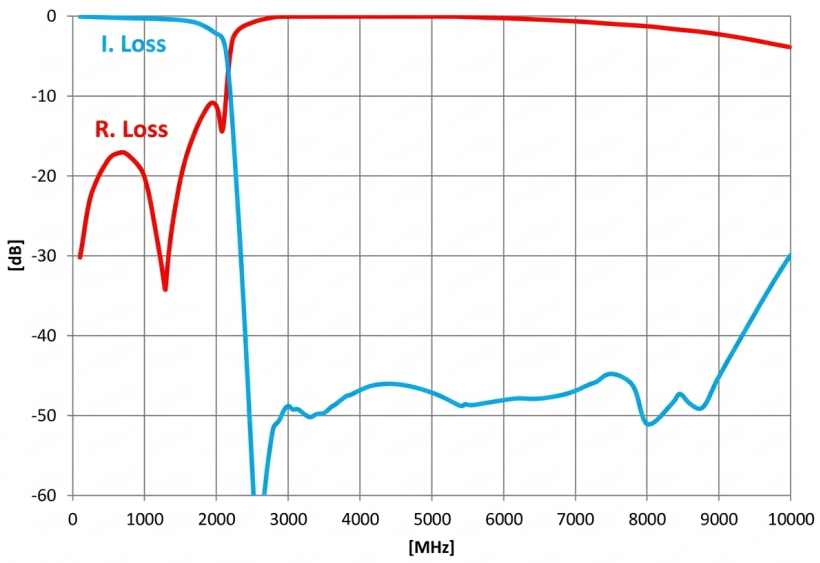
2816 High Performance Low Pass 20W

LP2816A1700SNTR

ELECTRICAL SPECIFICATIONS

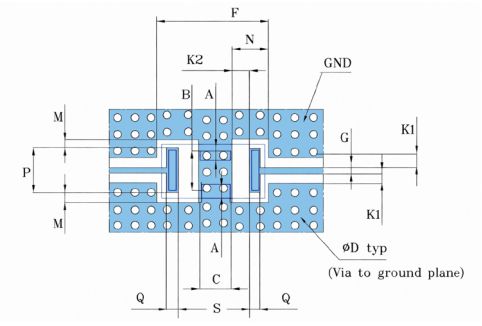
LP2816A1700SNTR		
Parameter	**Value**	**Notes**
Fc	1700 MHz	
Insertion Loss @ 1700 MHz	-0.85 dB	Max.
Return Loss @ 1700 MHz	-14 dB	Typ.
Rejection @ 2.38 GHz	-30 dB	Min.
Rejection @ 2.5-7.0 GHz	-40 dB	Min.
Rejection @ 7001-10000 MHz	-30 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

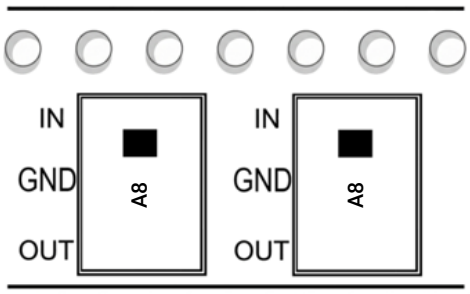
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

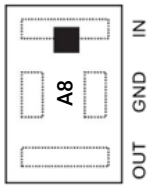


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

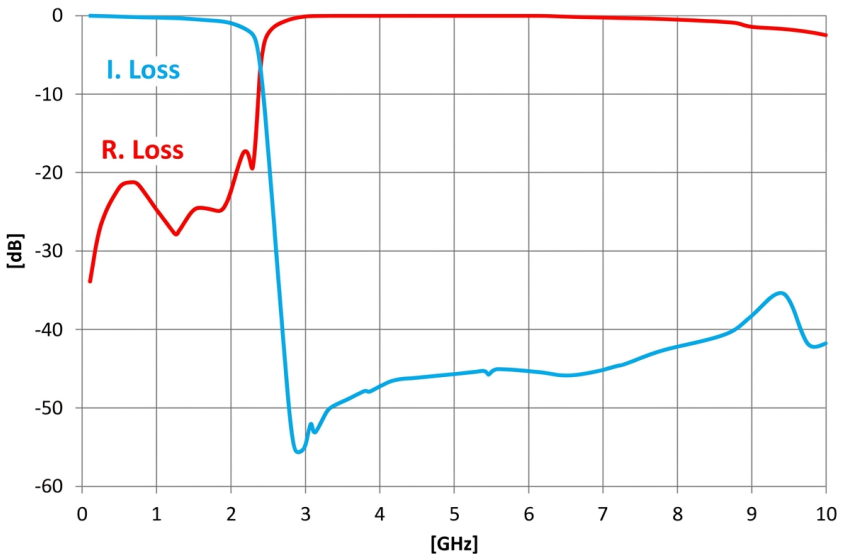
2816 High Performance Low Pass 20W

LP2816A1800SNTR

ELECTRICAL SPECIFICATIONS

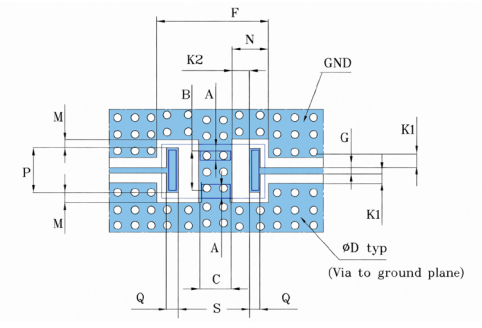
LP2816A1800SNTR		
Parameter	**Value**	**Notes**
Fc	1800 MHz	
Insertion Loss @ 1800 MHz	-0.75 dB	Max.
Return Loss @ 1800 MHz	-20 dB	Typ.
Rejection @ 2.8-8.5 GHz	-40 dB	Min.
Rejection @ 8501-10000 MHz	-35 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

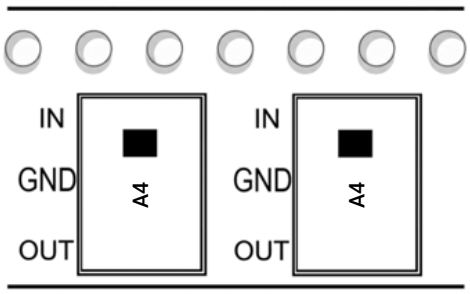
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

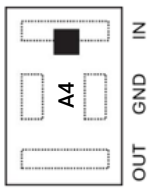


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





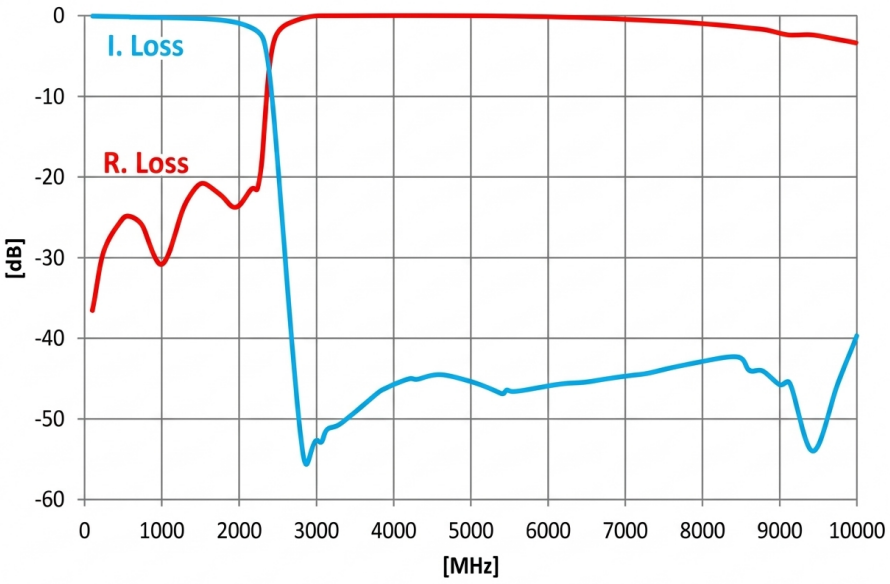
The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters
2816 High Performance Low Pass 20W
LP2816A1900SNTR

ELECTRICAL SPECIFICATIONS

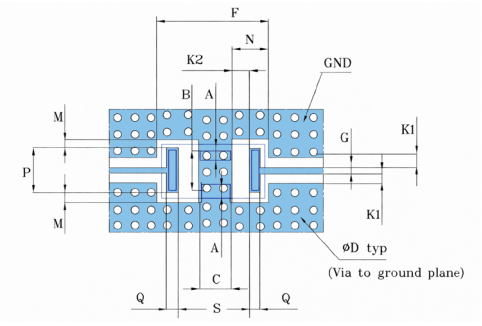
LP2816A1900SNTR		
Parameter	**Value**	**Notes**
Fc	1900 MHz	
Insertion Loss @ 1900 MHz	-0.8 dB	Max.
Return Loss @ 1900 MHz	-23 dB	Typ.
Rejection @ 2.66 GHz	-35 dB	Min.
Rejection @ 3.0-10 GHz	-40 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

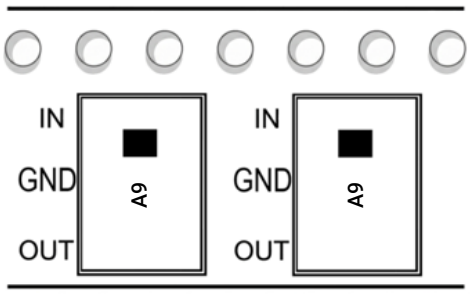
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

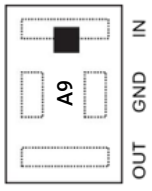


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.

Thin-Film RF/Microwave Filters

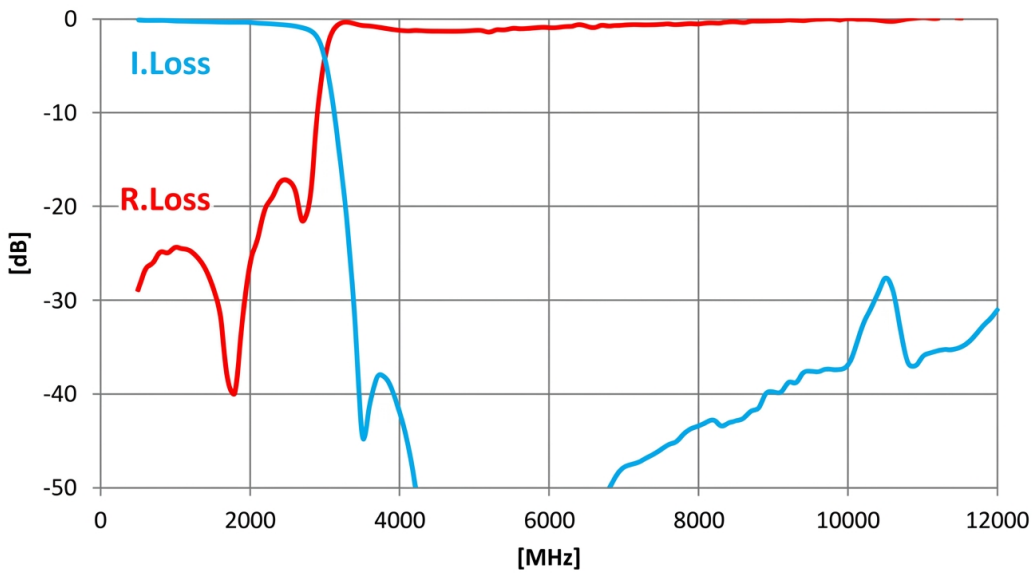
2816 High Performance Low Pass 20W

LP2816A2500SNTR

ELECTRICAL SPECIFICATIONS

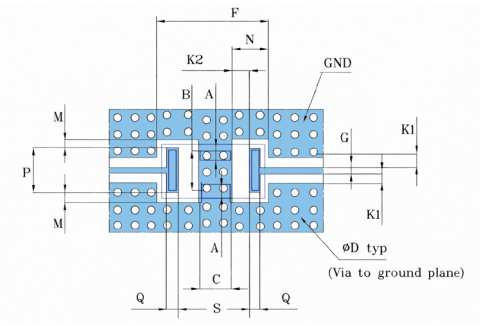
LP2816A2500SNTR		
Parameter	**Value**	**Notes**
Fc	2500 MHz	
Insertion Loss @ 2500 MHz	-0.8 dB	Max.
Return Loss @ 2500 MHz	-15 dB	
Rejection @ 3500 MHz	-35 dB	Min.
Rejection @ 4.8-8.8 GHz	-40 dB	Min.
Power Handling	20 W	RF Continuous
Impedance	50 Ohm	
Operating Temp.	-40 to +85 ℃	
Size	7x4x1.2 mm	2816

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PAD LAYOUT

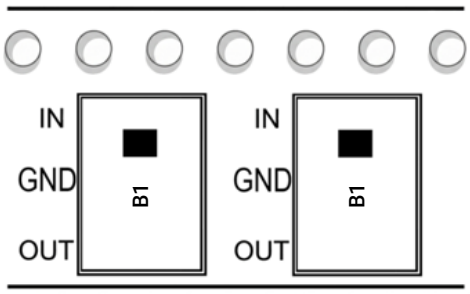
**PCB Taconic RF-35P*
***The recommended distance to the PCB Ground Plane is 0.254mm (0.010")*
****VIA's should be filled under GND terminations*

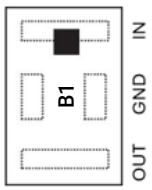


mm (inches)

D	ø0.6 ± 0.05 (0.024 ± 0.002)
G	0.5 ± 0.025 (0.02 ± 0.001)
K1	0.7 ± 0.04 (0.047 ± 0.0016)
K2	1.2 ± 0.04 (0.047 ± 0.0016)
N	2.7 ± 0.04 (0.1 ± 0.0016)
M	0.7 ± 0.04 (0.028 ± 0.0016)
S	4.6 ± 0.04 (0.18 ± 0.0016)
F	7.6 ± 0.05 (0.3 ± 0.002)
P	3.2 ± 0.1 (0.16 ± 0.004)
Q	0.8 ± 0.04 (0.031 ± 0.0016)
A	0.6 ± 0.15 (0.024 ± 0.006)
B	3.0 ± 0.15 (0.12 ± 0.006)
C	2.0 ± 0.15 (0.08 ± 0.006)

TERMINALS (TOP VIEW), IN REEL





The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at www.kyocera-avx.com/disclaimer/ by reference and should be reviewed in full before placing any order.