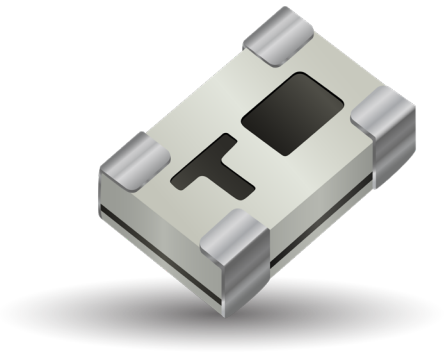
Thin-Film RF/Microwave Filters

HP0805 Thin Film High Pass Filter

General Information



ITF TECHNOLOGY

The HP0805 High Pass 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: 0805
- Characteristic impedance: 50Ω
- Operating / Storage temp: -40°C - +85°C
- Low profile
- Rugged construction
- Taped and reeled
- RoHS compliant

APPLICATIONS

- 5G \ UWB
- Base stations
- Mobile communications
- Satellite TV receivers
- Vehicle location systems
- Wireless LAN's

HOW TO ORDER

HP	0805	H	XXXX	A	S	TR
		Type	Frequency MHz	Sub-Type	Termination	Taped & Reeled

RoHS COMPLIANT

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℃, 85% RH, 160 hours
- Endurance : 125℃, IR, 4 hours

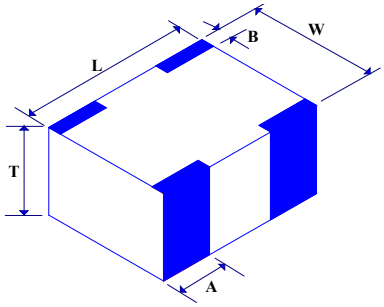
TERMINATION

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

POWER RATING

3W Continuous

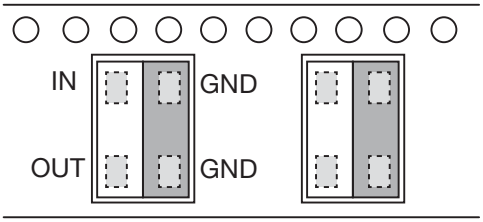
DIMENSIONS (BOTTOM VIEW)



mm (inches)

L	2.03±0.1 (0.080±0.004)
W	1.55±0.1 (0.061±0.004)
T	0.8±0.1 (0.032±0.004)
A	0.56±0.25 (0.022±0.010)
B	0.35±0.15 (0.014±0.006)

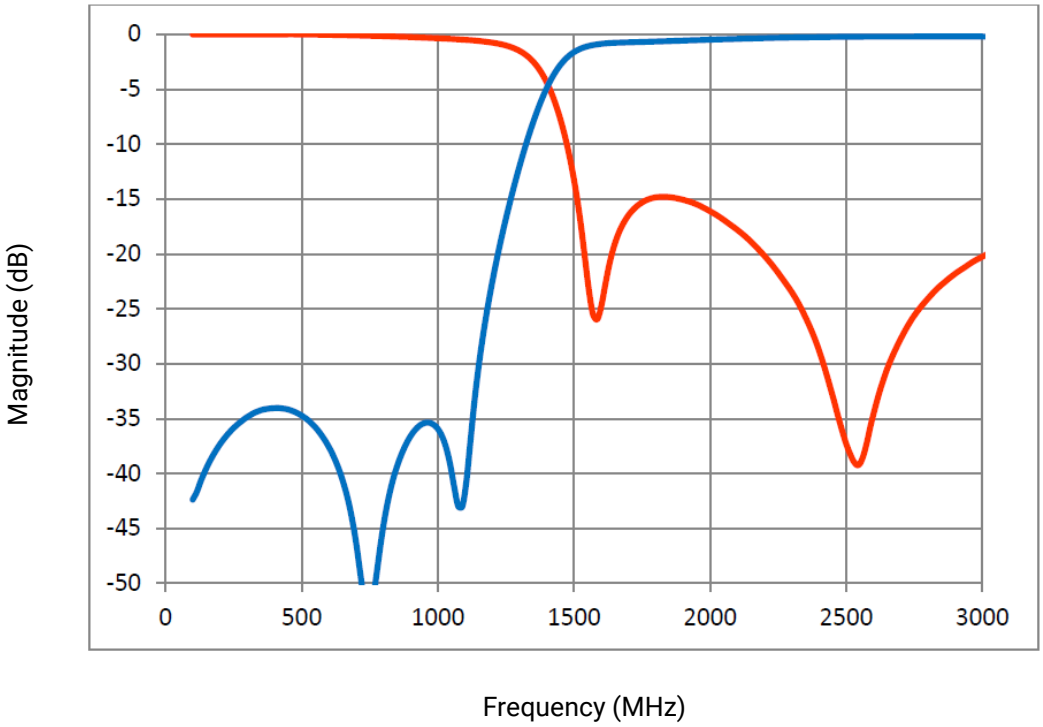
ORIENTATION IN TAPE



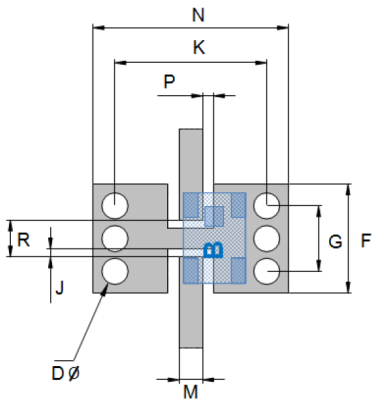
ELECTRICAL CHARACTERISTICS

Parameter	Value	Unit	Notes
Fc	1600	MHz	
Insertion Loss @ 1600 MHz	-1.0	dB	
Rejection @ 1120 MHz	-25	dB	
Power Handling	5	W	RF Continuous
Impedance	50	Ohm	
Operating Temp.	-40 to +85	°C	

TYPICAL ELECTRICAL PERFORMANCE



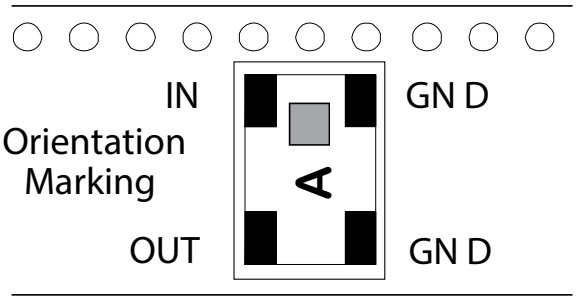
RECOMMENDED PCB PAD LAYOUT



mm (inches)

F	2.5±0.05
G	1.5±0.05
K	0.19±0.05
M	3.48±0.05
N	0.54±0.025
P	4.48±0.05
R	0.25±0.05
S	0.85±0.05
D	0.60±0.05

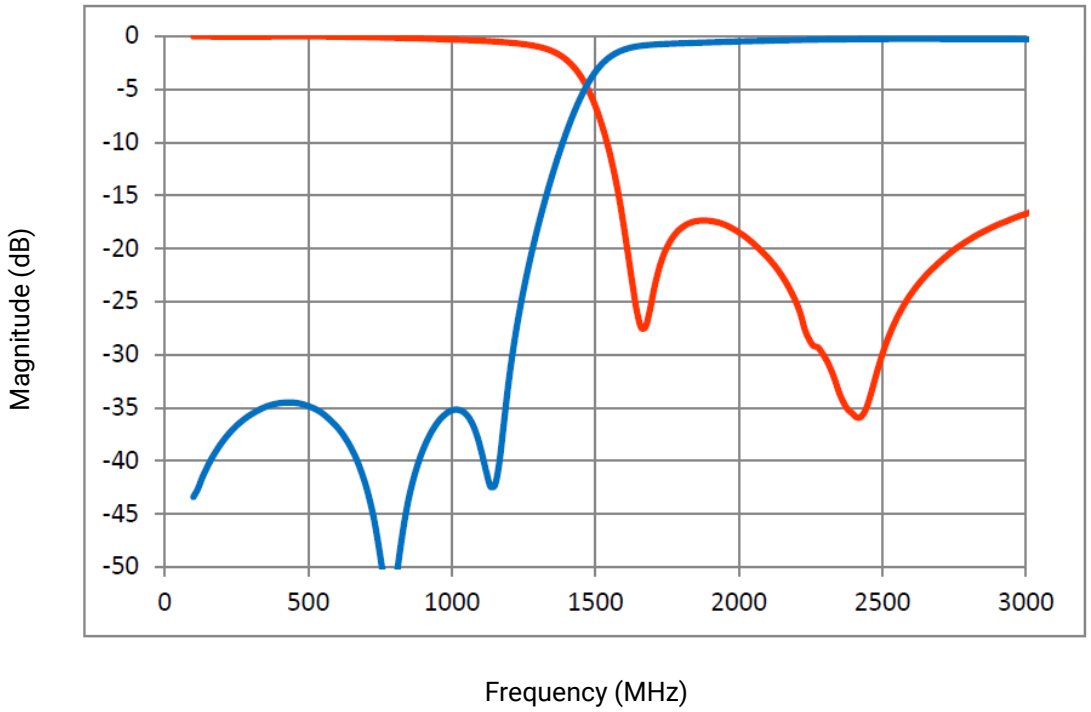
TERMINALS (TOP VIEW)



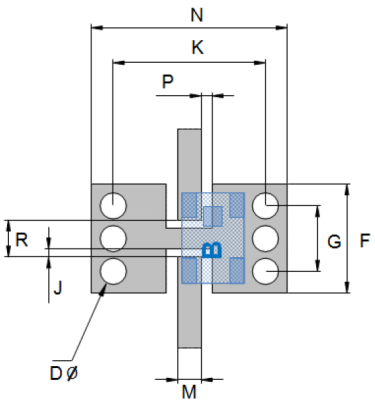
ELECTRICAL CHARACTERISTICS

Parameter	Value	Unit	Notes
Fc	1700	MHz	
Insertion Loss @ 1700 MHz	-1.0	dB	
Return Loss @ 1700 - 3000 MHz	-15	dB	
Rejection @ 1200 MHz	-25	dB	
Power Handling	5	W	RF Continuous
Impedance	50	Ohm	
Operating Temp.	-40 to +85	°C	

TYPICAL ELECTRICAL PERFORMANCE

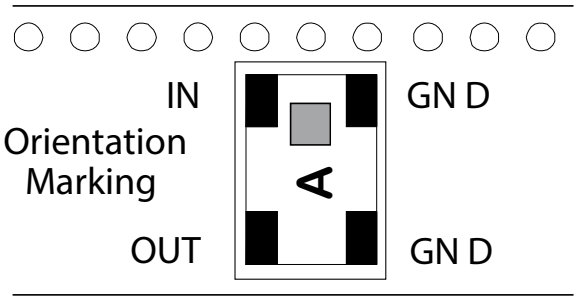


RECOMMENDED PCB PAD LAYOUT *(MM)*



mm (inches)	
F	2.5±0.05
G	1.5±0.05
K	0.19±0.05
M	3.48±0.05
N	0.54±0.025
P	4.48±0.05
R	0.25±0.05
S	0.85±0.05
D	0.60±0.05

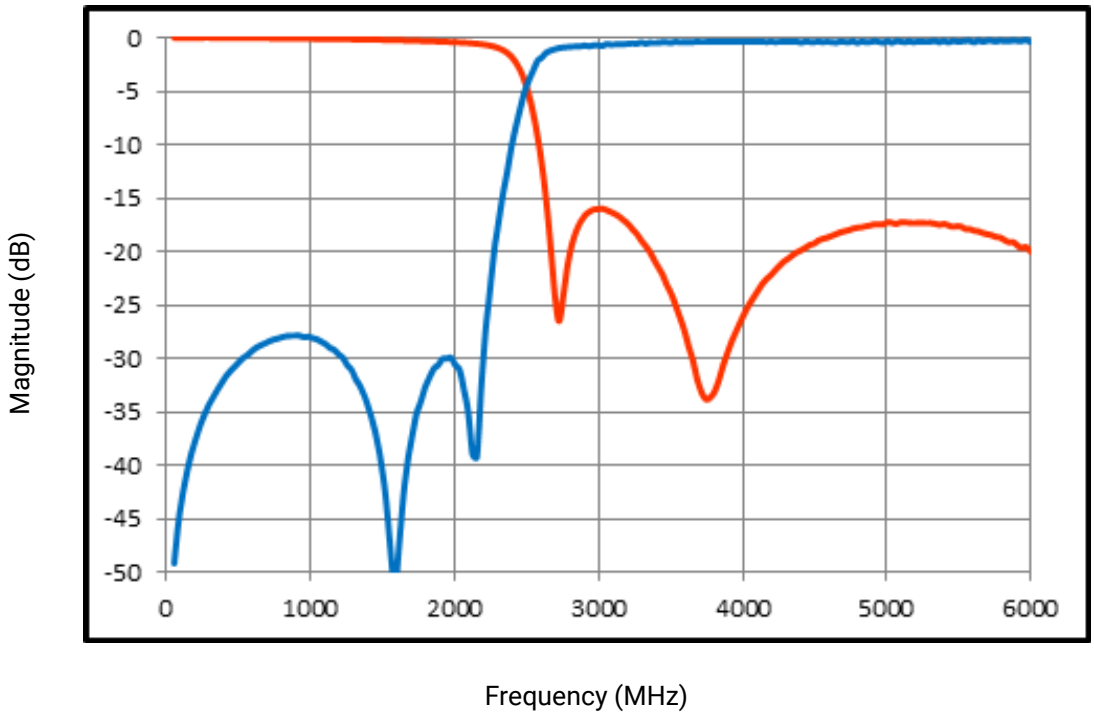
TERMINALS (TOP VIEW)



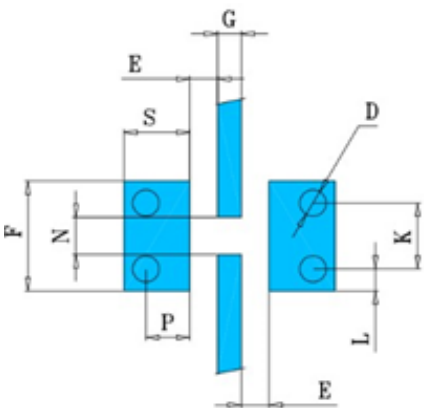
ELECTRICAL CHARACTERISTICS

Parameter	Value	Unit	Notes
Fc	2700	MHz	
Insertion Loss @ 2700 MHz	-1.1	dB	
Return Loss @ 2700 - 6000 MHz	-15	dB	
Rejection @ 2000 MHz	-25	dB	
Power Handling	3	W	RF Continuous
Impedance	50	Ohm	
Operating Temp.	-40 to +85	°C	

TYPICAL ELECTRICAL PERFORMANCE



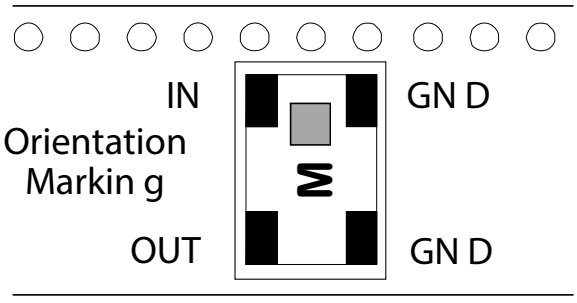
RECOMMENDED PCB PAD LAYOUT *(MM)*



Dimensions: millimeters

G	0.54
N	0.85
E	0.63
S	1.5
F	2.5
K	1.5
P	1.0
L	0.5
D	ø0.6

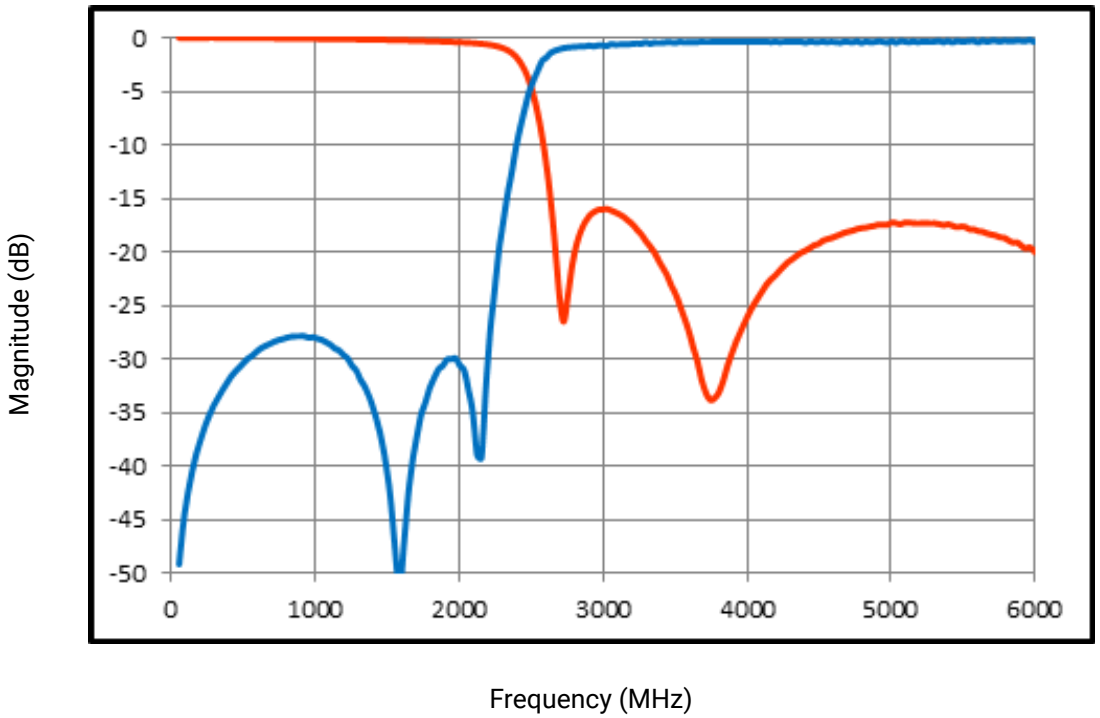
TERMINALS (TOP VIEW)



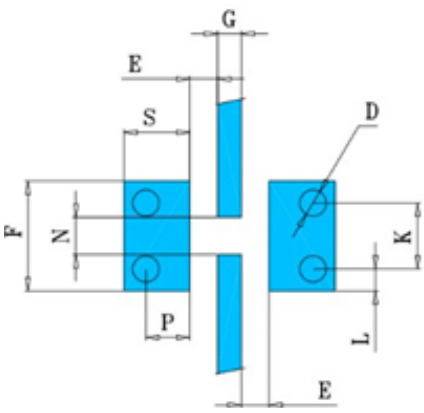
ELECTRICAL CHARACTERISTICS

Parameter	Value	Unit	Notes
Fc	2800	MHz	
Insertion Loss @ 2800 MHz	-1.0	dB	
Return Loss @ 2800 - 6000 MHz	-15	dB	
Rejection @ 2000 MHz	-25	dB	
Power Handling	3	W	RF Continuous
Impedance	50	Ohm	
Operating Temp.	-40 to +85	°C	

TYPICAL ELECTRICAL PERFORMANCE



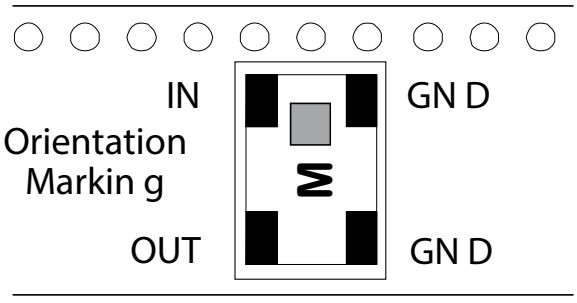
RECOMMENDED PCB PAD LAYOUT *(MM)*



Dimensions: millimeters

G	0.54
N	0.85
E	0.63
S	1.5
F	2.5
K	1.5
P	1.0
L	0.5
D	ø0.6

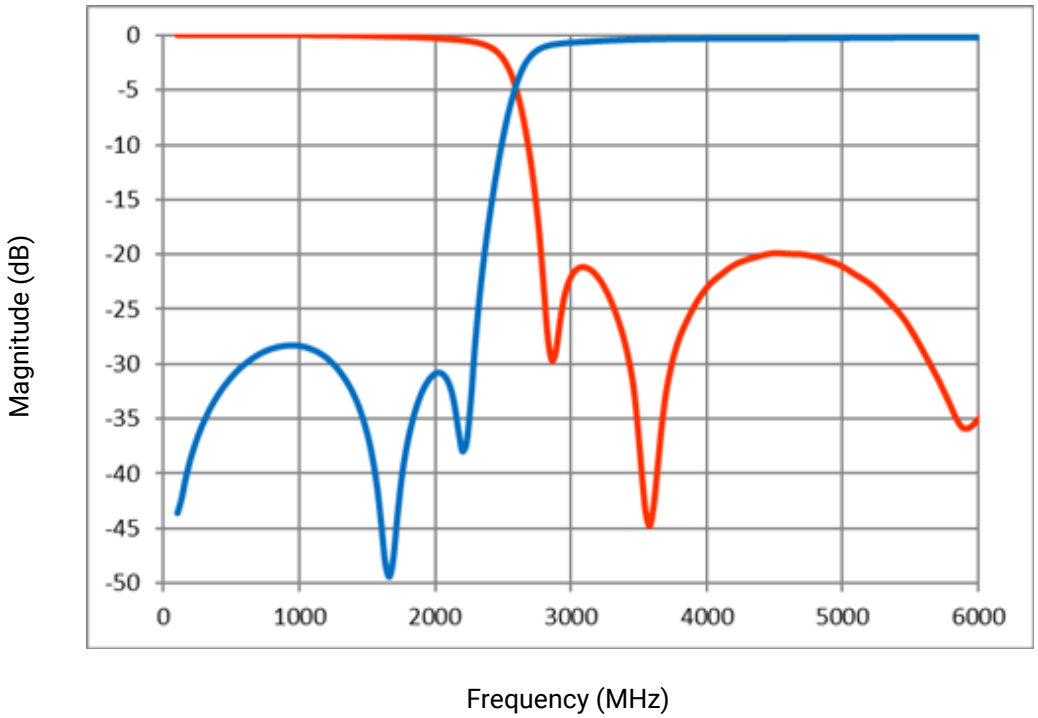
TERMINALS (TOP VIEW)



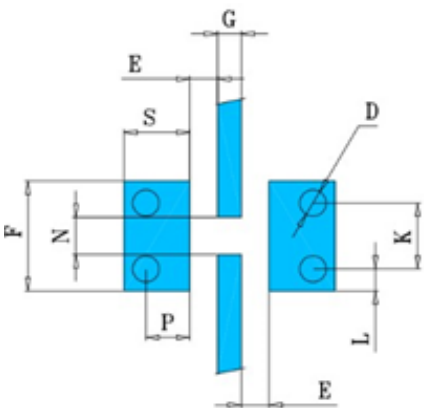
ELECTRICAL CHARACTERISTICS

Parameter	Value	Unit	Notes
Fc	2900	MHz	
Insertion Loss @ 2900 MHz	-1.0	dB	
Return Loss @ 2900 - 6000 MHz	-15	dB	
Rejection @ 2000 MHz	-25	dB	
Power Handling	3	W	RF Continuous
Impedance	50	Ohm	
Operating Temp.	-40 to +85	°C	

TYPICAL ELECTRICAL PERFORMANCE



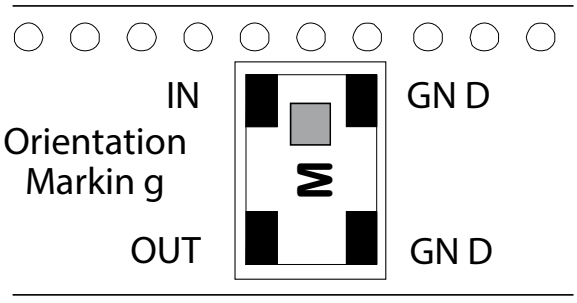
RECOMMENDED PCB PAD LAYOUT *(MM)*



Dimensions: millimeters

G	0.54
N	0.85
E	0.63
S	1.5
F	2.5
K	1.5
P	1.0
L	0.5
D	ø0.6

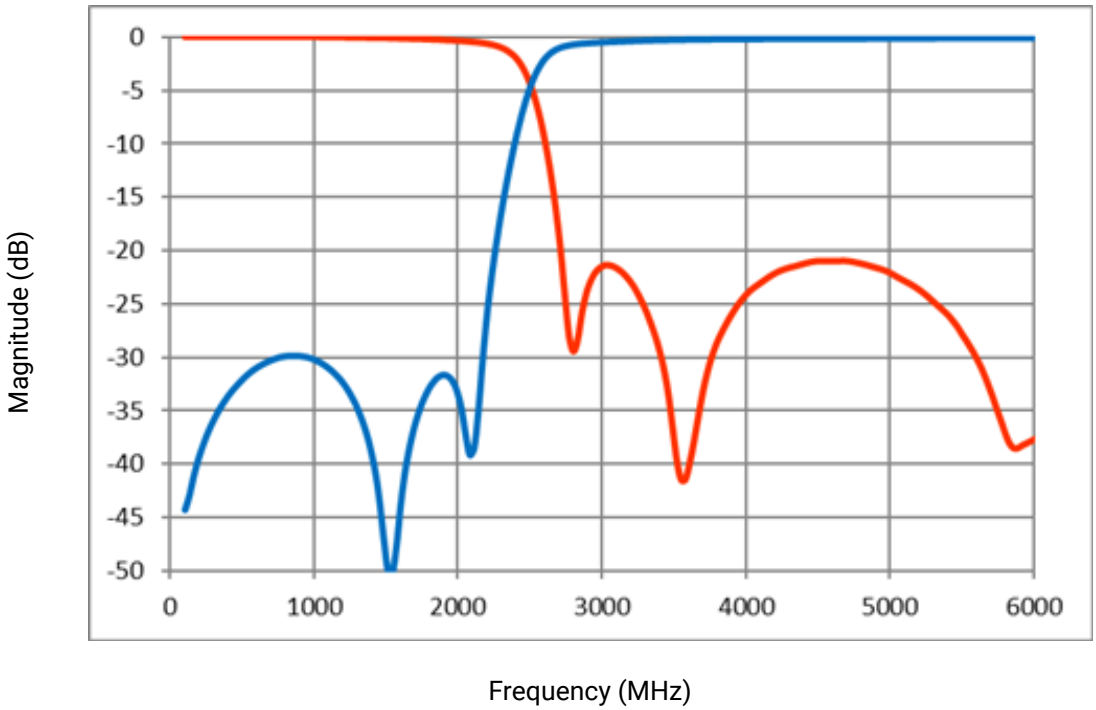
TERMINALS (TOP VIEW)



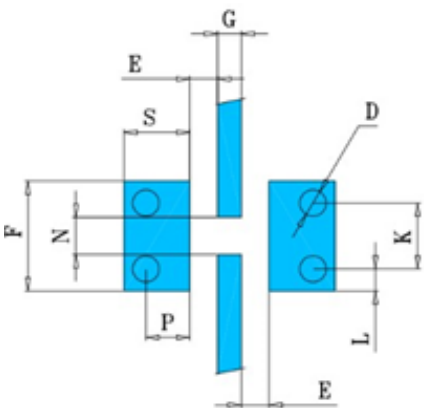
ELECTRICAL CHARACTERISTICS

Parameter	Value	Unit	Notes
Fc	3000	MHz	
Insertion Loss @ 3000 MHz	-0.85	dB	
Return Loss @ 3000 - 6000 MHz	-15	dB	
Rejection @ 2100 MHz	-25	dB	
Power Handling	3	W	RF Continuous
Impedance	50	Ohm	
Operating Temp.	-40 to +85	°C	

TYPICAL ELECTRICAL PERFORMANCE



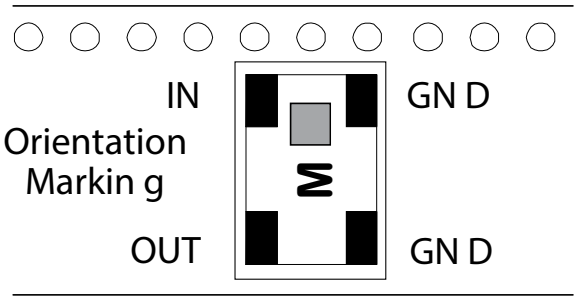
RECOMMENDED PCB PAD LAYOUT *(MM)*



Dimensions: millimeters

G	0.54
N	0.85
E	0.63
S	1.5
F	2.5
K	1.5
P	1.0
L	0.5
D	ø0.6

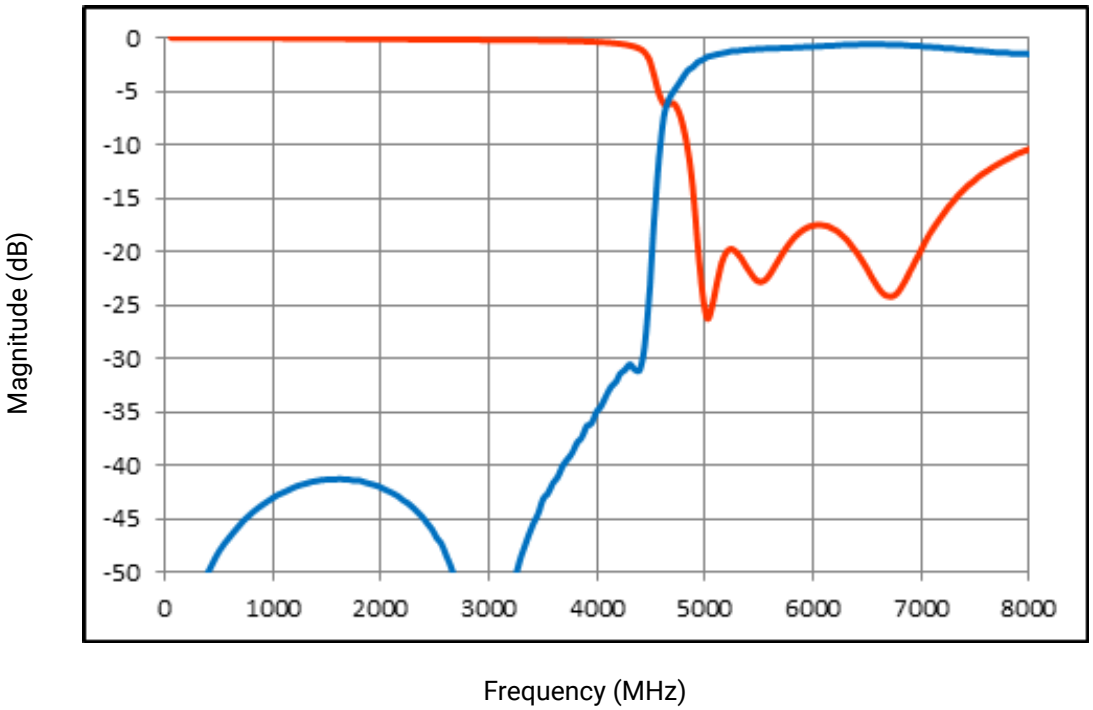
TERMINALS (TOP VIEW)



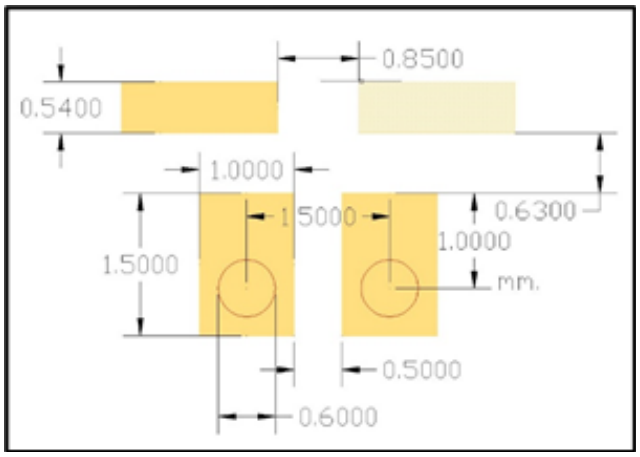
ELECTRICAL CHARACTERISTICS

Parameter	Value	Unit	Notes
Fc	5150	MHz	
Insertion Loss @ 5150 MHz	-1.5	dB	
Return Loss @ 5150 - 7000 MHz	-15	dB	
Rejection @ 4000 MHz	-25	dB	
Power Handling	3	W	RF Continuous
Impedance	50	Ohm	
Operating Temp.	-40 to +85	°C	

TYPICAL ELECTRICAL PERFORMANCE



RECOMMENDED PCB PAD LAYOUT *(MM)*



TERMINALS (TOP VIEW)