

Thin-Film Low Pass Filter

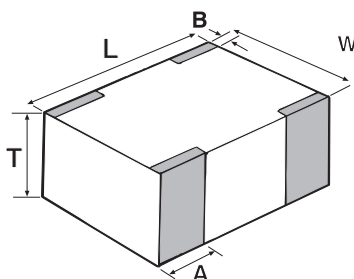
LP0805 Type Harmonic

GENERAL DESCRIPTION

The ITF (Integrated Thin-Film) SMD 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 frequency bands compatible with various types of high frequency wireless systems.

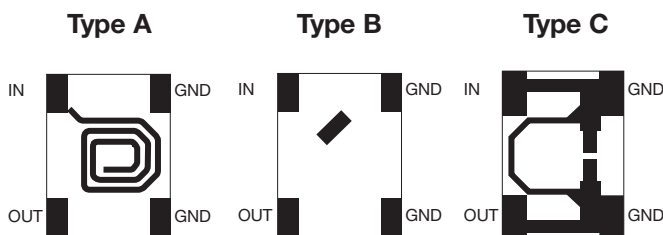
DIMENSIONS: millimeters (inches)



L	2.03±0.1 (0.080±0.004)
W	1.55±0.1 (0.061±0.004)
T	1.02±0.1 (0.040±0.004)
A	0.56±0.25 (0.022±0.010)
B	0.35±0.15 (0.014±0.006)



TERMINALS AND LAYOUT (Top View)



APPLICATIONS

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

FEATURES

- Small Size: 0805
- Frequency Range: 800MHz - 3.5GHz
- Characteristic Impedance: 50Ω
- Operating / Storage Temp.: -40°C ÷ +85°C
- Power Rating: 3W Continuous
- Low Profile
- Rugged Construction
- Taped and 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, I_R 4 hours

TERMINATION

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

HOW TO ORDER

LP
T
Style
Low Pass

0805A
T
Size
0805

0902
T
Frequency
MHz

AW
T
Termination
Nickel/Solder (Sn/Pb)

TR
T
Packaging Code
TR = Tape and Reel

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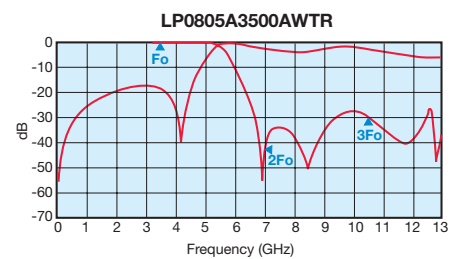
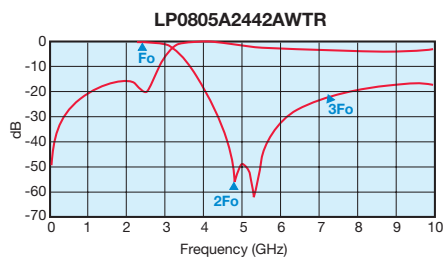
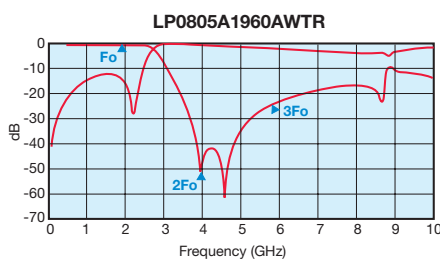
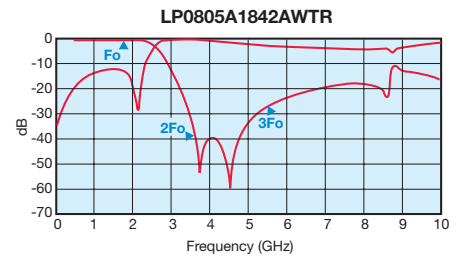
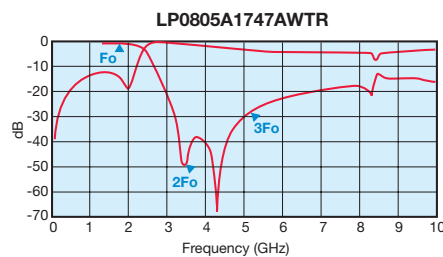
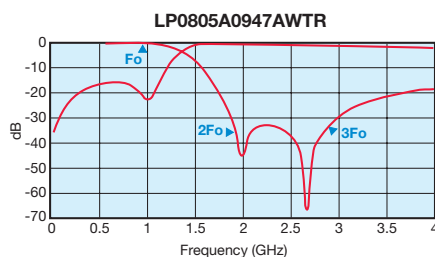
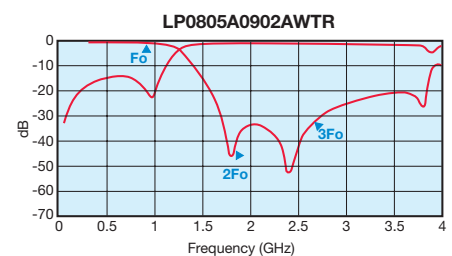
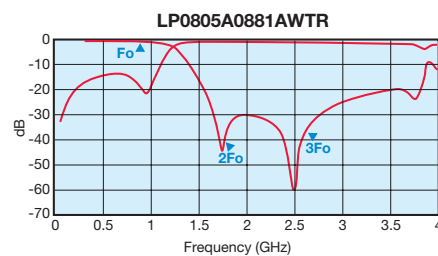
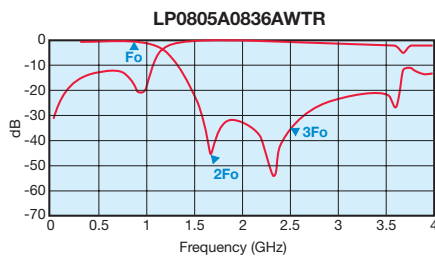


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ELECTRICAL CHARACTERISTICS

Application	Part Number	Frequency Band (MHz)	I. Loss max	VSWR max	Attenuation (dB) Typical	Layout Type
E-GSM	LP0805A0897AW	880 ~ 915	0.4dB (0.3dB typ)	1.7	30 @ 2X _{Fo} 20 @ 3x _{Fo}	A
	LP0805A0942AW	925 ~ 960				A
GSM	LP0805A0902AW	890 ~ 915				A
	LP0805A0947AW	935 ~ 960				A
AMPS	LP0805A0836AW	824 ~ 849				A
	LP0805A0881AW	869 ~ 894				A
PCN	LP0805A1747AW	1710 ~ 1785				B
	LP0805A1842AW	1805 ~ 1880				B
PCS	LP0805A1880AW	1850 ~ 1910				B
	LP0805A1960AW	1930 ~ 1990				B
PHP	LP0805A1907AW	1895 ~ 1920				B
DEDT	LP0805A1890AW	1880 ~ 1900				B
Wireless LAN	LP0805A2442AW	2400 ~ 2484				B
WLL	LP0805A3500AW	3400 ~ 3600				C

Typical Electrical Performance



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Test Jig

ITF TEST JIG FOR LOW PASS FILTER 0805

GENERAL DESCRIPTION

This jig is designed for the testing of the 0805 Low Pass Filter using a vector network analyzer.

It consists of a FR4 multi-layer substrate, having 50Ω microstrips as conducting lines and a ground plane in the middle layer, located at a distance of 0.2mm from the microstrips.

The connectors are SMA type (female), 'Johnson Components Inc.' Product P/N: 142-0701-881.

CALIBRATION AND MEASUREMENT PROCEDURE

The jig is designed for a full 2-port calibration. LOAD calibration is carried out using a 50Ω SMA termination.

To measure a component, it can be either soldered or pressed down by a non-metallic stick until all four ports touch the appropriate pads.

