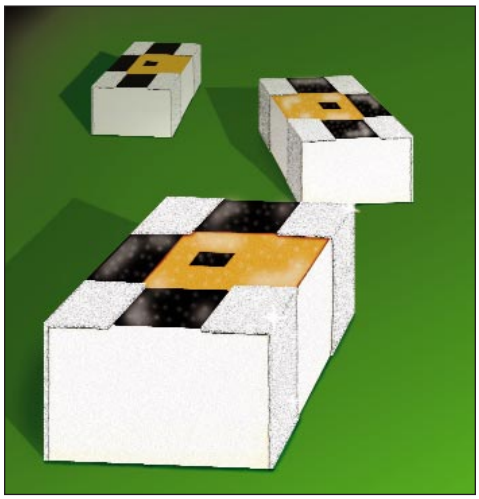
Thin-Film Low Pass Filter

LP0805 Type Harmonic

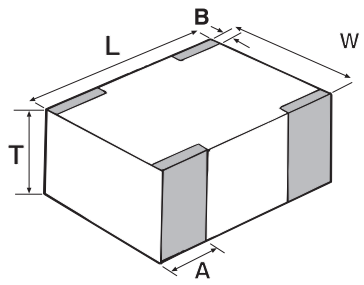
GENERAL DESCRIPTION

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.

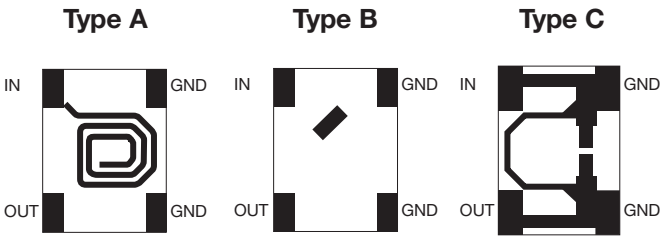


DIMENSIONS: millimeters (inches)



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	0805A	0902	AW	TR
Style Low Pass	**Size** 0805	**Frequency** MHz	**Termination** Nickel/Solder (Sn/Pb)	**Packaging Code** TR = Tape and Reel

Thin-Film Low Pass Filter

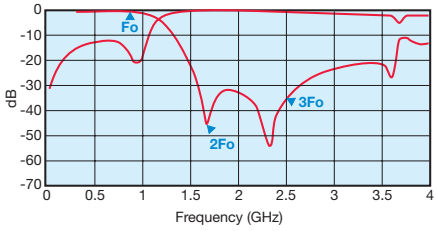
LP0805 Type Harmonic

ELECTRICAL CHARACTERISTICS

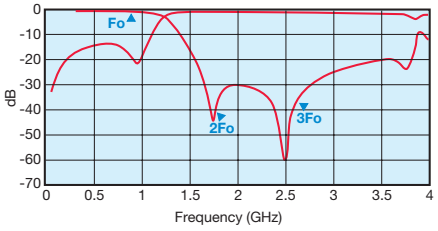
Application	Part Number	Frequency Band (MHz)	I. Loss max	VSWR max	Attenuation (dB) Typical	Layout Type
E-GSM	LP0805A0897AW	880 ~ 915	0.4dB (0.3dB typ)	1.7	30 @ 2XFo 20 @ 3xFo	A
	LP0805A0942AW	925 ~ 960				A
GSM	LP0805A0902AW	890 ~ 915				A
	LP0805A0947AW	935 ~ 960				A
AMPS	LP0805A0836AW	824 ~ 849				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

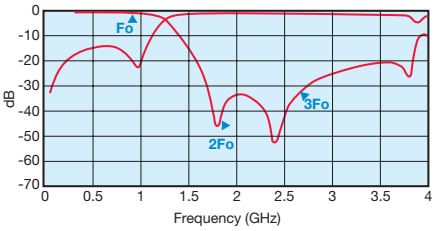
LP0805A0836AWTR



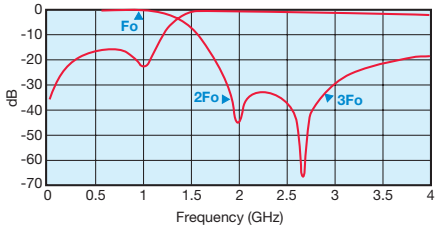
LP0805A0881AWTR



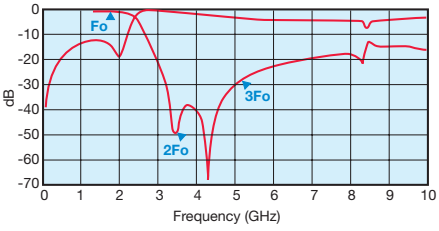
LP0805A0902AWTR



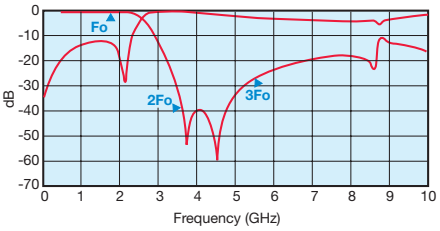
LP0805A0947AWTR



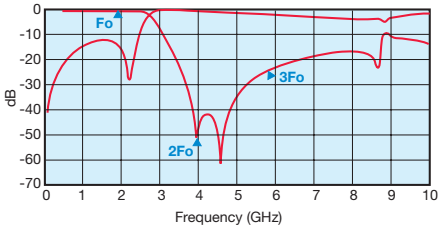
LP0805A1747AWTR



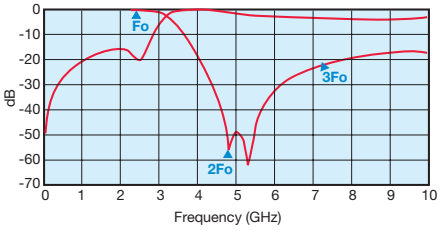
LP0805A1842AWTR



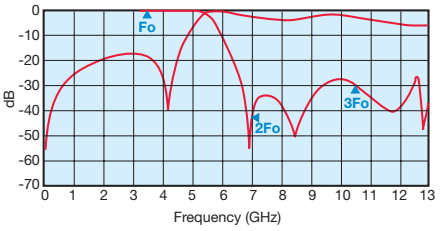
LP0805A1960AWTR



LP0805A2442AWTR



LP0805A3500AWTR



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.

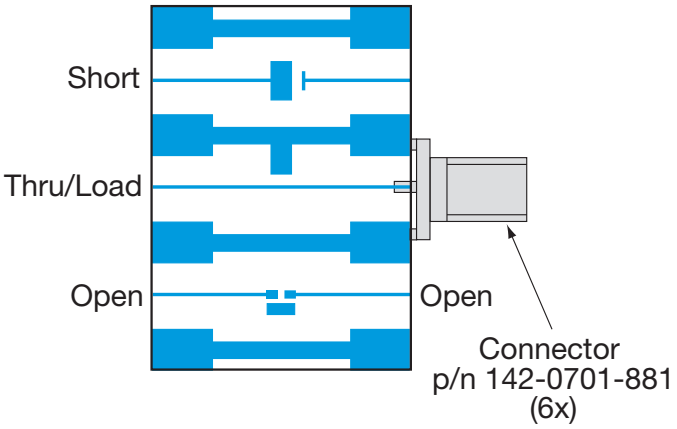
The connectors are SMA type (female), 'Johnson Components Inc.' Product P/N: 142-0701-881.

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.

Calibration



Measurement