



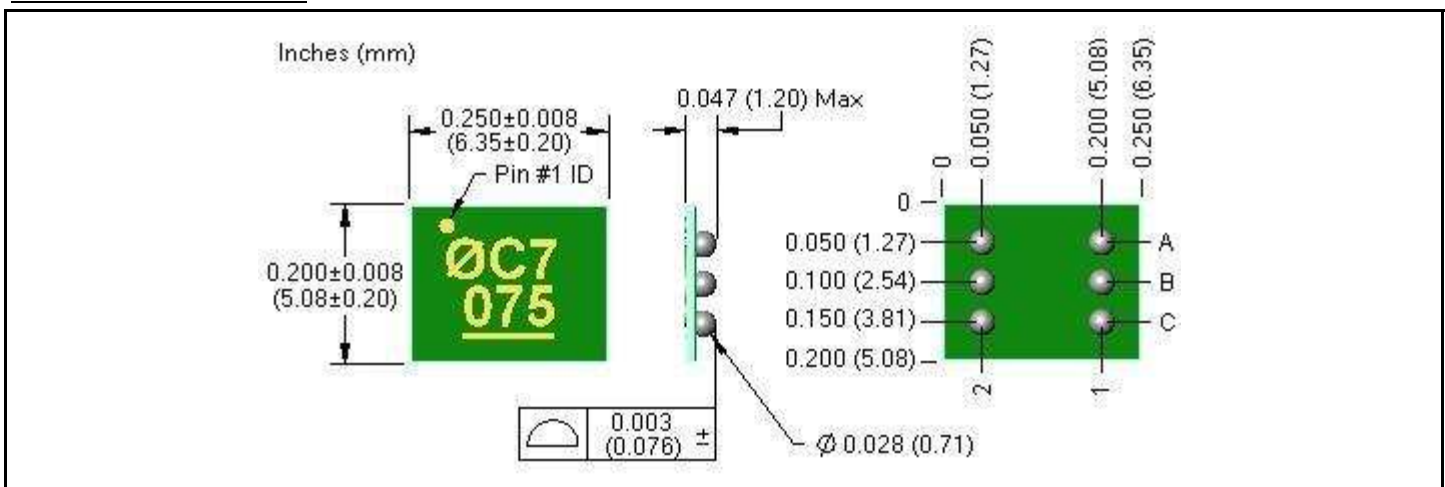
Product Family: [Bessel Absorptive Filter-7th Order](#)
Part Number Series: [FL7 Series](#)

	<p>Construction:</p> <ul style="list-style-type: none"> • High Purity Alumina Substrate • Nickel alloy thin-film resistive element • Epoxy-resin overcoat • Available in RoHS (Sn95.5/Ag3.8/Cu0.7) or Non-RoHS (Sn63/Pb37) 	<p>Features:</p> <ul style="list-style-type: none"> • Cutoff frequencies between 6.0GHz and 10.0GHz • Low pass • Absorptive • Ball Grid Array (BGA) for high bandwidth • Competitive pricing
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Description:
 Thin Film Technology FL7 series of surface mount low pass filters are designed for cost effective use in applications where low phase dispersion and good return loss are important characteristics. The Filter performs an absorptive, low pass function that attenuates high frequencies. The high bandwidth BGA surface mount construction creates a high performance filter that is easy for you to use. The standard series covers from 6.0 GHz to 10.0 GHz. This filter can be used in applications from loss emulation to adjusting optical receiver sensitivities.

This product is currently available with solder finishes of Sn63/Pb37, as well as a RoHS compliant / Lead Free solder finish of Sn95.5/Ag3.8/Cu0.7. For the RoHS compliant / Lead Free part, the customer must specify this upon ordering by following the instructions in the part numbering section of this specification.

Product Dimensions:



Part Numbering: Ex. FL7B5BH075S-T*-C

Product Designator	Orders	Type	Impedance	Function	Footprint	Cutoff Freq.	Custom Code	T&R Qty *	RoHS
FL	7 (7th Order)	B (Absorptive)	5 (50 ohm)	B (Bessel)	H (6 ball BGA)	060 = 6.0GHz 065 = 6.5GHz 070 = 7.0GHz 075 = 7.5GHz 080 = 8.0GHz 085 = 8.5GHz 090 = 9.0GHz 095 = 9.5GHz 100 = 10.0GHz	S (Standard) TBD (Custom)	-T1 = 100 -T5 = 500	-C (RoHS) Leave blank for non-RoHS

*Note: T&R package quantity (-T#) will be added to the part number by us depending on the quantity ordered.

Electrical Specifications:

Parameter	Specification
English Size	2520
Metric Size	6450
Type	Absorptive Low Pass
Function	Bessel
Order	7th
Reference Impedance	50 ohms
Fc Cutoff Freq (-3dB)	6.0 to 10.0GHz in 0.5GHz steps
Fc Cutoff Tolerance	Fc (-3dB) $\pm 5\%$ (ie 6.0 \pm 0.3GHz, 10.0 \pm 0.5GHz)
Return Loss (S11)	<12dB Loss through Fc
(S22)	<10dB Loss through Fc
Rejection	-10dB through two times Fc
Group Delay Ripple (max)	20ps Max through Fc
Rated Current	100mA
Isolation Resistance	>100Mohm @ 50Vdc
Operating Temperature	-40°C ~ +85°C
Packaging	100 or 500 pcs/reel

Please consult the factory for any desired variations to the above specifications

Frequency Performance Plots -10GHz typical:

S2,1 (Blue) / S1,1 (Black)

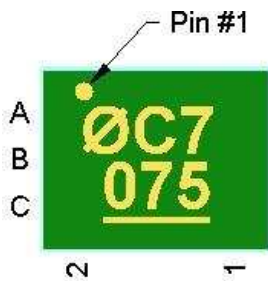
S1,2 (Blue) / S2,2 (Black)

Phase Response (Blue) / Group Delay (Black)

These products are available mounted into a Coaxial Measurement Module (CMM) for bench evaluation purposes. Please call the factory.

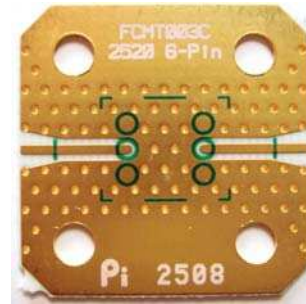
Marking and Recommended Land Pattern:

Marking:



Pin 1	Corner of pin A1
Row 1	TFT "don't stop" logo
	C = Monthly date code
	7 = Filter orders (7th)
Row 2	Fo Freq (075=7.5GHz)
Row 3	Underline indicates absorptive type filter

Recommended Land Pattern:



Please call the factory for DXF output of Land Pattern

Tape and Reel Packaging:

Packaging Specifications	General Guidelines & Recommendations
Packaging Requirements	<ul style="list-style-type: none"> All taping done in accordance with EIA 481 standards. Pieces taped with the marking up and showing through the cover tape (as shown in the drawing below). All orders under 100 pcs will be put on cut tape only with no leader or trailer.
Labeling Requirements	Labels will contain the TFT part number and quantity of pieces taped.

