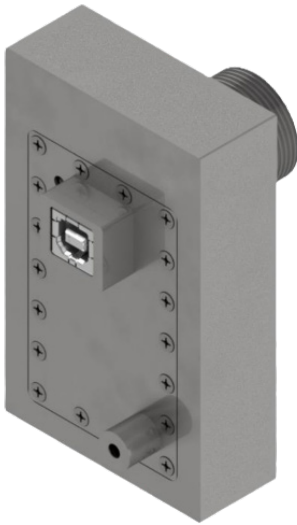


## Pasif USB 2.0 Universal Serial Bus EMI Filter



The *Pasif USB 2.0* is a passive EMI filter engineered to pass USB 2.0 — Low Speed (1.5 Mb/s), Full Speed (12 Mb/s), and High Speed (480 Mb/s) — into electromagnetically shielded enclosures without compromising shielding effectiveness. Built using a cascading filter design with steep cutoff performance, the *Pasif USB 2.0* provides >80dB rejection from 700MHz to 40GHz ensuring signals traverse the enclosure cleanly and securely. It can also be used as a simple 4-line EMI filter for general signal or low power applications (up to 500mA per line).

### Passive Design for Maximum Flexibility

- No power required — install anywhere without dependence on external power infrastructure.
- Ideal for static or mobile secure environments, where simplicity and reliability are key.

### Compact and Rugged Form Factor

- Approximate dimensions of 3.6" x 2.2" x 0.9" (excluding mounting hardware) is about the size of a deck of cards.
- Constructed from precision-machined solid aluminum with nickel plating for durability.

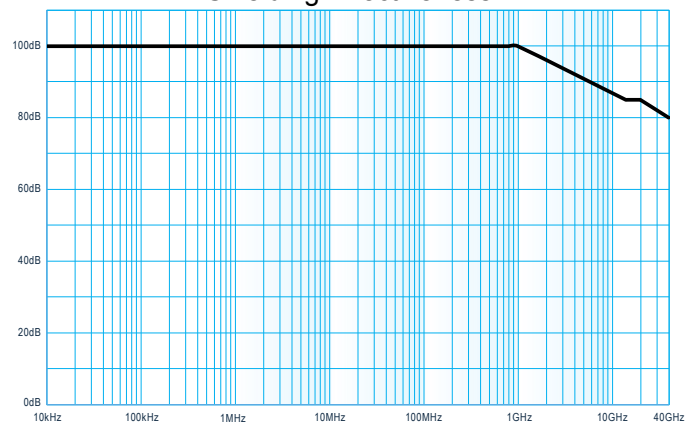
### Universal Mounting System

- Supports all shield thicknesses using a universal threaded mounting hub. Requires a simple, circular mounting hole for use with multiple standard penetration lengths (e.g., short, medium, long) to accommodate different wall types.
- Field-changeable penetrations simplify deployment.

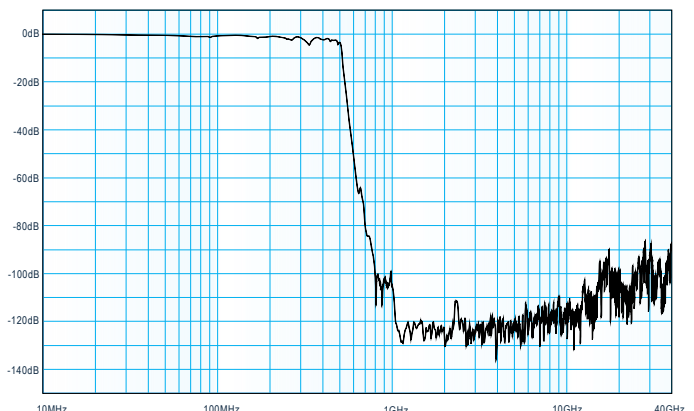
### Suitable for ICD 705

- Engineered to meet the physical and technical security controls outlined in Intelligence Community Directive (ICD) 705, DoD and EMSEC Standards.
- Offers a trusted alternative to fiber optic penetrations for SCIF, SAPF, and TEMPEST applications.

Shielding Effectiveness



Insertion Loss



## Technical Specifications

<b>Filter Performance</b>	Shielding Effectiveness	>100dB from 10kHz to >1GHz (typical) >80dB from 1GHz to 40GHz (typical) <i>Note: Tested without cables attached</i>
	Insertion Loss	>80dB from 700MHz to 40GHz (typical) >90dB from 750MHz to 30GHz (typical)
<b>Electrical Performance</b>	Lines	4 Lines
	Max Power	57VDC; 40VAC; 500mA Per Line
	Data Line Impedance	90Ω Typical
	Supported Data Speeds	Low Speed (LS) 1.5 Mb/s Fast Speed (FS) 12 Mb/s High Speed (HS) 480 Mb/s
<b>Environmental</b>	Operating Temperature	0°C - 40°C (32°F - 104°F) Continuous
	Humidity	5% - 90% (non condensing)
<b>Construction</b>	Filter Housing	Aluminum w/Electroless Plated Nickel
	Dimensions	3.55" x 2.20" x 0.86"
	Mounting	1-20 UNEF-2A Mounting Stub for Threaded Penetration 1" NPS Threaded Penetration (1.32" Ø x 1", 3", 9", 12" or Custom)
	Connectors	USB 2.0 Type B Female (Input) USB 2.0 Type A Female (Output)
	Indicator LEDs	Power (Red) - Lit When Power From Host is Present

## Drawing

