

Filter Performance Testing



1.0 GENERAL

INSTECH performance testing methods cover the physical parameters, quality acceptance and quality conformance test requirements for INSTECH filters.

2.0 PHYSICAL PARAMETERS

Marking (Filter body size permitting) : INSTECH part number and date code.

3.0 QUALITY ACCEPTANCE TEST REQUIREMENTS

3.1 Sampling Plan: Per MIL-PRF-15733, table 10.

3.2 Physical dimensions and workmanship: filters shall meet dimensions shown on part drawings. The devices shall be manufactured and processed in a careful and workmanlike manner in accordance with good design and sound practice.

4.0 QUALITY CONFORMANCE REQUIREMENTS

CONDUCTED TEST	MIL-STD-220A		POST TEST NOTES
	TEST NO.	METHOD CONDITIONS	
4.1 - Visual and Mechanical check			
4.2 - Material, Constr. & Workmanship			In accordance with applicable specs
4.3 - Physical Dimensions & Marking			
4.4 - Vibrations	204	Method B for glass sealed. Method D for resin sealed.	No mechanical damage.
4.5 - Thermal Shock	107	Method A	Insulation Resistance: 500 megohms
4.6 - Immersion	104	Method 1	Insulation Resistance: 500 megohms
4.7 - Seal	112	Method A	No Leaks
4.8 - Capacitance	305	1 Khz, 2.5Vrms max. 25°C	Not applicable to Resin Sealed or Solder-in Products.
4.9 - Dielectric Withstanding Voltage	301	2.5 times DCWV for 5 sec. and 50 mA Max.	No evidence of Damage or Breakdown
4.10 - Insulation resistance	302	At DCWV for 2 minutes max and 50 mA.	Per Applicable Requirements.
4.11 - Insertion Loss	220	At No Load condition sample	Per Applicable Requirements.
4.12 - Shock	213	Method 1	No Mechanical damage.
4.13 - Resistance to Soldering Heat	210	Method B	Insulation Resistance greater than 500 megohms or 500 ohm/farad.
4.14 - Life	108	Method D	Filters shall meet all initial specs except Insulation Resistance shall not be less than 50% of initial guaranteed value.

5.0 - "R" Level testing is available upon request.