Inspection Method Sheet

Part Number/ Symix Number: Generic Drawing Number: Generic Page 1 of 3 Doc. #: TT-PC-0539 Rev. 5 Part Name: <u>6mm Filters</u> Operation: In Process/ Final Inspection Written By: Myra Cope Date: 11-12-09

Applicable customer specifications take precedence over this procedure (reference customer drawing).			
Description / Dimensions	Picture / Detail	Sample Size / Method / Standard	
1) Initial Mechanical: Check for hanging chips and peeling of silver from the resonators. If hanging chips are removed part must be re-tested prior to shipping.		 Method: Visual Sample Size: 100% 	
 2) Chips: Acceptable on edge or face of resonator unless metal peeling from edge of chip. Tape test to confirm peeling. SM (2mm) & MP (3 mm): 0.5mm any direction LP (4mm) & LS (4mm): 1 mm any direction SP (6mm): 1.5mm any direction EP (8mm): 1.5mm any direction HP (12mm): 2mm any direction 	Acceptable	 Method: Visual inspection. Verify using Tape test (using a 600 3M tape) Sample Size: 100% 	
3) Blisters: Blisters are acceptable as long as they pass tape test.		 Method: Visual, Tape test if needed (using a 600 3M tape) Sample Size: 100% 	
 4) Pin Clearance: Inspect for minimum clearance between the tab or pin collar and case: 'T' Style = Min. 0.015 in 'F' Style = Min. 0.010 in 	"T"	 Method: Pin Gauges Sample Size: 100% 	

5) Pin movement: Pin movement is acceptable as long as it passes Pin Clearance (see #4) and pass electrical.		 Method: Visual (Reference #4) Sample Size: 100%
6) Electrical Test: Filters should be tuned/tested per supplies electrical specification.	For all tuned and/or tested filters, a ZAL test must be performed. A plot of a typical filter to be attached paperwork.	 Method: Network Analyzer Sampling Size: In Process: 100% Final (ZAL): 1.0 AQL using TT- PC-0245, C=0 Sampling Plan
7) "S" Type Filters: Measure the the gap between the leads and the case as indicated. The gap must be 0.052" to 0.076". Verify the coplanarity of the leads. The leads shall not be greater than 0.005" above or below the plane of test.		 Method: Pin Gauges / Shim Stock Sampling Size: 1.0 AQL using TT-PC-0245, C=0 Sampling Plan
8) "F" Type Filters: Verify the coplanarity of the input/output, ground tabs and the case body between the tab as indicated. The tab shall not be greater than 0.005" above or below the plane of test.		 Method: Shim Stock / Surface Plate Sampling Size: 100%
 9) Verify Soldering: Verify solder connection exists between the pin and tab. Unsoldered condition shown – should be reworked and retested electrical. 		 Method: Visual Sample Size: 100%
 10) Verify Soldering: Solder Balls: Verify no solder balls attached to face of ceramic or case edge. If solderballs are removed – reverify electrically. 		 Method: Visual Sample Size: 100%

11) "T" Type Filters: Verify that the input/output pins and case legs are all parallel to each other, and perpendicular to the body of the resonator as indicated. Also verify that no exposed brass is seen on the legs due to tuning.		 Method: Visual Sample Size: 100%
12) Cleaning:Verify filters are clean and free of flux residues.		 Method: Visual Sample Size: 100%
13) Check Marking:Verify marking as indicated on the BOM. Example shown.Printing should be centered on the filter. Label may be required.	FOR EXAMPLE	 Method: Visual Sample Size: 100%