

NOTES:

- THIS DOCUMENT DESCRIBES A HIGH RELIABILITY FILTER AND FEEDTHRU DISCOIDAL CAPACITOR MANUFACTURED, SCREENED AND TESTED PER MIL-PRF-28861 EXCEPT WHERE NOTED.
- DESIGNED TO BE LASER WELDED TO AN ALUMINUM HOUSING.
- HERMETIC LEAK RATE: LESS THAN OR EQUAL TO 1×10^{-9} CC/SEC He AT 1 ATM DIFFERENTIAL PRESSURE.
- ELECTRICAL REQUIREMENTS:

DIELECTRIC WITHSTANDING VOLTAGE: THERE SHALL BE NO EVIDENCE OF BREAKDOWN, FLASHOVER OR DETERIORATION WHEN SUBJECTED TO 250 VOLTS DC.
 INSULATION RESISTANCE: SHALL BE $> = 100,000$ MEGOHMS AT 100 VDC.
 INSERTION LOSS: PER TABLE I.

CAPACITANCE TO GROUND: SHALL BE $5,000\mu\text{F}$ $+100\%$ -0% .

DC RESISTANCE: SHALL BE 0.02 OHMS MAX.

VOLTAGE RATING: SHALL BE 100 VDC MAX.

CURRENT RATING: 5 AMPERES DC ;TEMPERATURE RISE 25°C WHEN TESTED PER MIL-PRF-28861.

- VISUAL, MECHANICAL, AND ELECTRICAL TESTING SHALL BE IN ACCORDANCE WITH MIL-PRF-28861 AND TABLES 1 AND 2. THE REQUIREMENTS PER TABLES 1 AND 2 TAKE PRECEDENCE OVER MIL-PRF-28861.

6. MATERIALS:

SHELL: EXPLOSION BONDED STAINLESS STEEL TO 4XXX-SERIES ALUMINUM.
 CONTACTS: BERYLLIUM-COPPER 1AW ASTM B196 OR ASTM B197.
 INSULATORS: KRYOFLEX 313 PROPRIETARY POLYCRYSTALLINE CERAMIC.
 SOLDER: PIN TO CAP 96% Sn / 4% Ag. CAP TO CASE 80% Au / 20% EPOXY: RTV 615.
 ENCAPSULANT: BACON P85

7. FINISH:

PIN, FERRULE, AND SHELL: ELECTROLYTIC NICKEL PLATE 1AW QQ-N-290, .000100/.000250 THICK.
 GOLD PLATE 1AW ASTM B 488, TYPE I, CODE A, .000075/.000250 THICK.

SHELL: UNPLATED IN AREA SHOWN TO ALLOW LASER WELD.

8. ORDERING INFORMATION:

PLEASE SPECIFY ACCORDING TO THE FOLLOWING

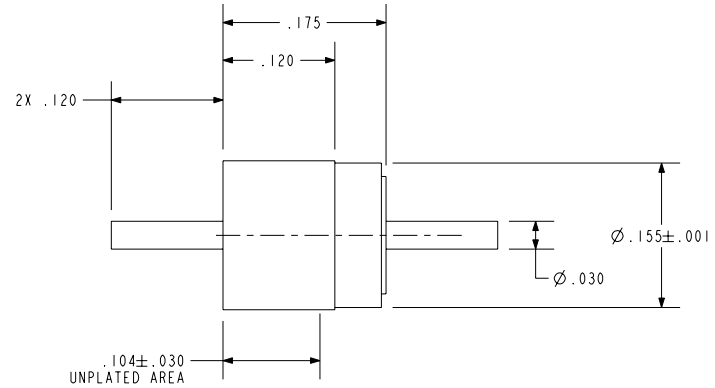
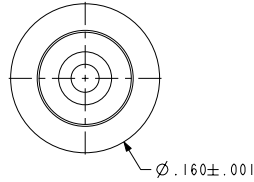
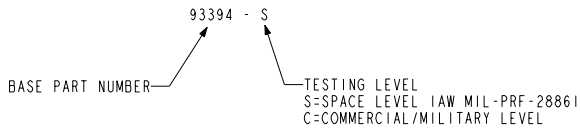


TABLE I

PART NUMBER	INSULATION RESISTANCE AT +125°C	RATED DC CURRENT	MAX. DF %	CAPACITANCE (pF) +100 -000	MIN. INSERTION LOSS (db) PER MIL-STD-220			
					10 MHz	100 MHz	1 GHz	10 GHz
----	10^4 MEGOHM	5 A	2.5	5,000	15	30	50	60

NOTES:

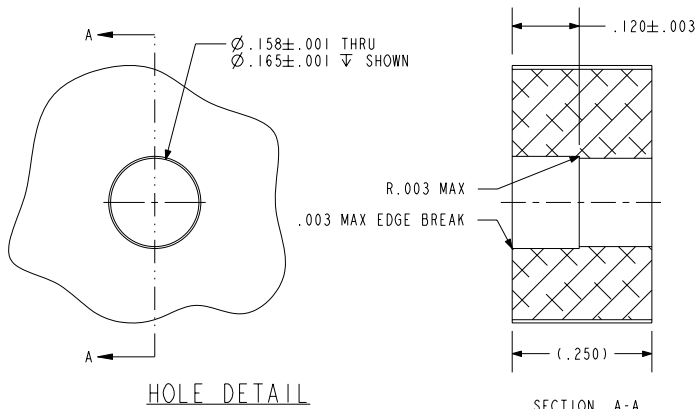
- L circuit insertion loss measurements shall be made under full load over the frequency range of 1 MHz to 10 MHz. Insertion loss measurements above this frequency range shall be made under no load. For C circuits insertion loss measurements shall be made under no load.
- The insertion loss requirements between any two adjacent specified frequencies shall be made that of the lower of the two frequencies in order to accommodate resonant dips.
- The ten (10) GHz test need not be performed if guaranteed by the manufacturer.

TABLE 2 - GROUP B INSPECTION

INSPECTION	TEST METHOD MEL-F-28861	NUMBER OF SAMPLES	NUMBER OF DEFECTS
GROUP I TEMPERATURE RISE CURRENT OVERLOAD DPA	4.6.11 4.6.14 4.6.21	5 2	0
GROUP II SUBGROUP I LIFE	4.6.2.6	1/ 2/	0

NOTES:

- Group B Inspection Group II Life Test shall require first submission of each individual filter from each manufacturer, a quantity of 22 sample filters minimum. Thereafter, the sample size shall conform to MIL-F-28861.
- The MIL-F-28861 Group B Subgroup I Life Test shall be extended to 2000 hours for the first submission of each individual filter. Data shall be read and recorded per MIL-F-28861, at the zero hour, 1000 hour and the 2000 hour intervals. The Capacitance, Dissipation Factor and IR shall be measured and meet the test limits per Table 2 herein at zero, 1000 hour and 2000 hour intervals.

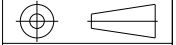


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TITLE: FEEDTHROUGH, SINGLE PIN, FILTERED, AL-COMPATIBLE

THIRD ANGLE PROJECTION



CAGE CODE: 64567

SALES DRAWING

SHEET: 1 OF 1

DOCUMENT: 0-93394