ML61 Series

RoHS COMPLIANT

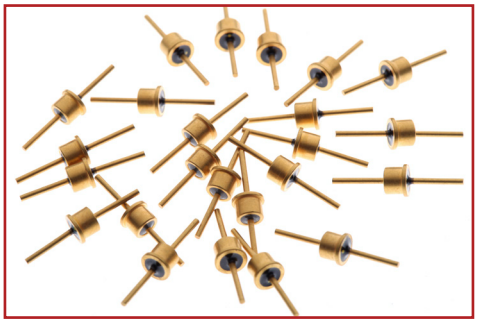
Lowpass, Feed-through, Solder-In, C-Circuit Filters

Military Specification: M28861/12H

PART NUMBER	MIL DASH NO.	RATED VOLTAGE (Vdc)	CAP (pF)	MINIMUM INSERTION LOSS (dB) * 1 MHz	10 MHz	100 MHz	1 GHz	10 GHz	CONFIG
ML610-153AS	-002	50	15000	7	25	40	50	60	A
ML610-272BS	-004	100	2700	-	10	25	30	60	A
ML610-502BS	-006	100	5000	-	15	30	35	60	A
ML610-100CS	-008	200	10	-	-	-	4	10	A
ML610-250CS	-010	200	25	-	-	-	10	15	A
ML610-101CS	-012	200	100	-	-	3	20	20	A
ML610-501CS	-014	200	500	-	-	15	30	50	A
ML610-102CS	-016	200	1000	-	4	20	31	55	A
ML611-153AS	-018	50	15000	7	25	40	50	60	B
ML611-272BS	-020	100	2700	-	10	25	30	60	B
ML611-502BS	-022	100	5000	-	15	30	35	60	B
ML611-100CS	-024	200	10	-	-	-	4	10	B
ML611-250CS	-026	200	25	-	-	-	10	15	B
ML611-101CS	-028	200	100	-	-	3	20	20	B
ML611-501CS	-030	200	500	-	-	15	30	50	B
ML611-102CS	-032	200	1000	-	4	20	31	55	B
ML610-103AS	-034	50	10000	4	20	35	40	60	A
ML611-103AS	-036	50	10000	4	20	35	40	60	B

** Refer to MilSpec for details*

These RoHS components meet the ≤ 0.10% lead requirement and they are compatible with 260°C soldering processes.



APPLICATIONS:

- High Frequency/Microwave
- Telecom and Military Communications
- Multi-Circuit Filter Assemblies
- Industrial Controls
- Oscillators
- Attenuators
- Low Noise Amplifiers

FEATURES:

- Utilizes MLC discoidal capacitors, the 'heart' of the filter
- Low ESR/ESL
- Infinite paths to ground for lowest impedance to ground available
- Better filtering than MLCC chips and more robust than tubular capacitors
- Press fit style also available *(contact factory for details)*

NOTES:

- Operating Temperature Range: -55°C to +125°C
- Weight: 0.25 grams MAX
- Case and Lead Finish: Gold Plated
- Terminals: Solderable
- Rated Current: 5 A, MAX
- Dissipation Factor:
  2% Max for Capacitance values 10pF through 100pF
  3% Max for Capacitance values greater than 100pF
- Voltage & Temperature Limits of Capacitance:
  +15%, -40%
- Insulation Resistance:
  At +25°C: 1,000 MΩ-μF, or 100,000 MΩ MIN, whichever is less
  At +125°C: 100 MΩ-μF or 10,000 MΩ MIN, whichever is less
- Insertion Loss:
  At +25°C: see table
  At -55°C and +125°C: A 3 dB degradation from +25°C value shall be allowed
- Voltage Drop: 0.050 V MAX
- DC Resistance: 0.010 Ω MAX
- Temperature Rise: +25°C, MAX
- Qualification Class: B
- Soldering Temperature: Caution: These devices shall not be exposed to soldering temperatures exceeding +300°C. Exposure time to soldering temperature of +300°C shall not exceed 1 minute.
- Installation Note: These devices are intended to be installed into hermetically sealed packages with the glass seal oriented toward the outside world.

PART NUMBER DERIVATION:

ML61 1 - 502 C S **
1 2 3 4 5 6

1) Series, ML61

2) Configuration: A = 0, B = 1
"A" Configuration *(610) is a C-Filter/Steel Case (Au Plated) with glass seal on barrel end*
"B" Configuration *(611) is the same as "A" except the glass seal is on the flange end*

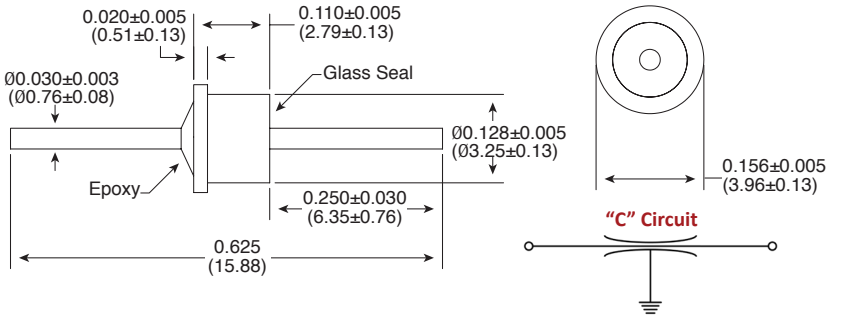
3) Cap Code: 2 Digits & Multiplier
Ex: 100 = 10pF, 101 = 100pF, 102 = 1000pF, 103 = 10000pF

4) Voltage Rating: A = 50Vdc, B = 100Vdc, C = 200Vdc

5) Lead-Wire: S = Standard

6) Special Requirements: (to be assigned by factory)

DRAWING FOR CONFIGURATION A:



in. (mm)

Configuration B has glass seal at the flange end; please refer to dimensional drawings for complete detail

This is a product of Instec Filters which is now part of TTE; this series will continue to be marked and sold under the Instec name.

TTE Filters • One Magnetics Parkway, Gowanda, NY 14070 USA • (t) 1-716-532-2234 • (f) 1-716-532-2702 • tte@tte.com

REV: ISSUE
04192021