

### Features

- Current rating up to 1.4 A
- Inductance range: 120 to 5000  $\mu$ H
- Frequency range to 200 MHz
- RoHS compliant\*

### Applications

- EMI suppression

## SRF1006 Series - Line Filter

### Electrical Specifications @ 25 °C

Part Number	L ( $\mu$ H) *	Leakage Ind. ( $\mu$ H) Max.	DCR ( $\Omega$ ) max. (each winding)	Rated Voltage (Vdc)	Rated Current (A)	Impedance (Z)	
						Freq. Range (MHz)	Min. Value ( $\Omega$ )
SRF1006-121Y	120 $\pm$ 40 %	1.45	0.025	50	1.40	10 - 200	200
SRF1006-251Y	250 $\pm$ 40 %	3.2	0.035	50	1.19	5 - 100	400
SRF1006-501Y	500 $\pm$ 40 %	5.6	0.070	50	0.84	2 - 50	800
SRF1006-102Y	1000 $\pm$ 40 %	12	0.180	50	0.52	1 - 40	1400
SRF1006-202Y	2000 $\pm$ 40 %	0.23	0.270	50	0.40	0.5 - 15	2000
SRF1006-302Y	3000 $\pm$ 40 %	0.26	0.330	50	0.35	0.5 - 10	3000
SRF1006-402Y	4000 $\pm$ 40 %	0.27	0.550	50	0.30	0.5 - 5	4000
SRF1006-472Y	4700 $\pm$ 40 %	0.28	1.000	50	0.25	0.6 - 3	6200
SRF1006-502Y	5000 $\pm$ 40 %	0.29	0.620	50	0.25	0.5 - 3	5000

\* Test condition: 0.1 V, 100 KHz

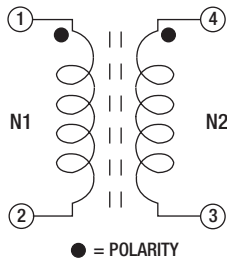
### General Specifications

Temperature Rise .. 45 °C at rated current  
 Hi-Pot  
 120 - 1000  $\mu$ H..... 1000 Vrms, 60 Hz,  
 3 mA, 1 min.  
 2000 - 5000  $\mu$ H..... 300 Vrms, 60 Hz,  
 3 mA, 1 min.  
 Operating Temperature  
 ..... -40 °C to +105 °C  
 (Temperature rise included)  
 Storage Temperature .. -40 °C to +105 °C  
 Solderability..... 245 °C for 5 sec.  
 (JEDEC J-STD-020D)

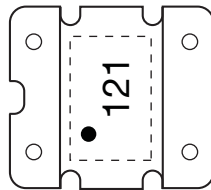
### Materials

Core Material..... Ferrite  
 Base ..... Phenolic  
 Wire ..... Enameled copper  
 Terminal coating ..... Sn  
 Packaging..... 800 pcs. per 13-inch reel

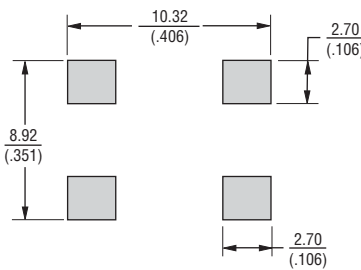
### Schematic



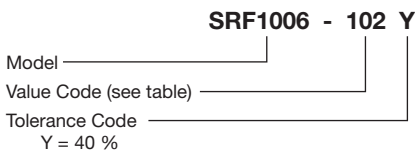
### Typical Part Marking



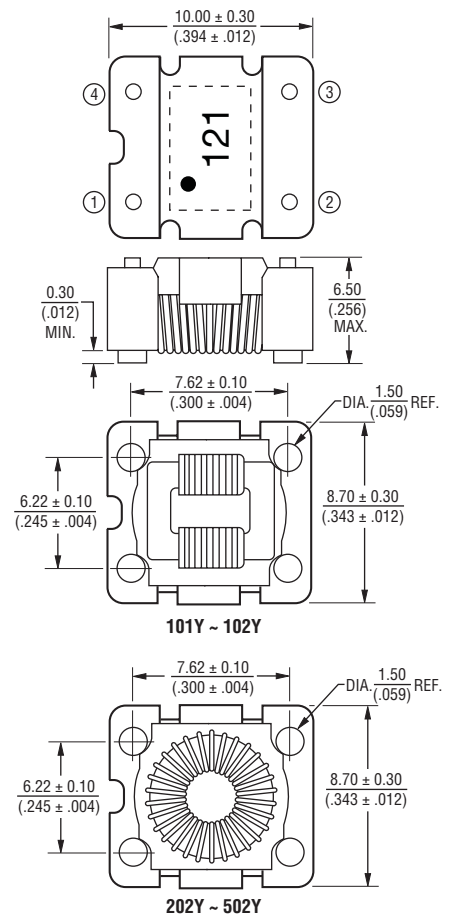
### Recommended Layout



### How to Order



### Product Dimensions



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$



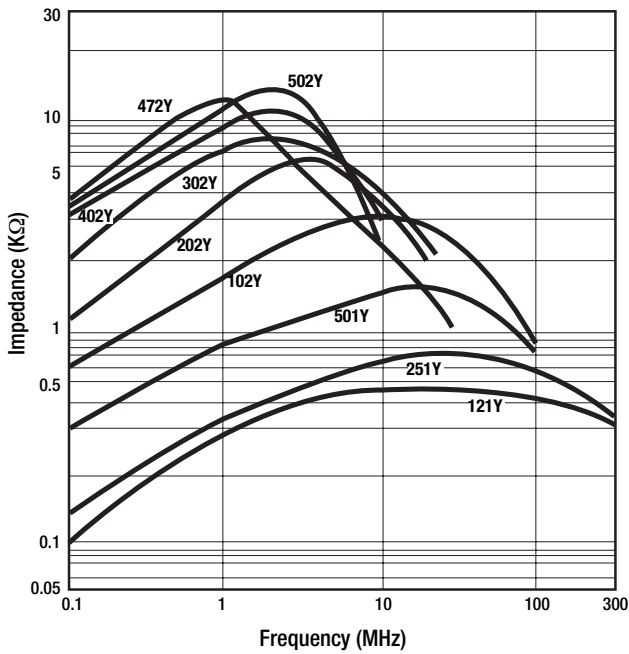
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\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications

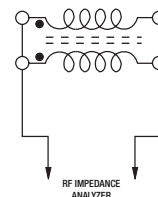
# SRF1006 Series - Line Filter

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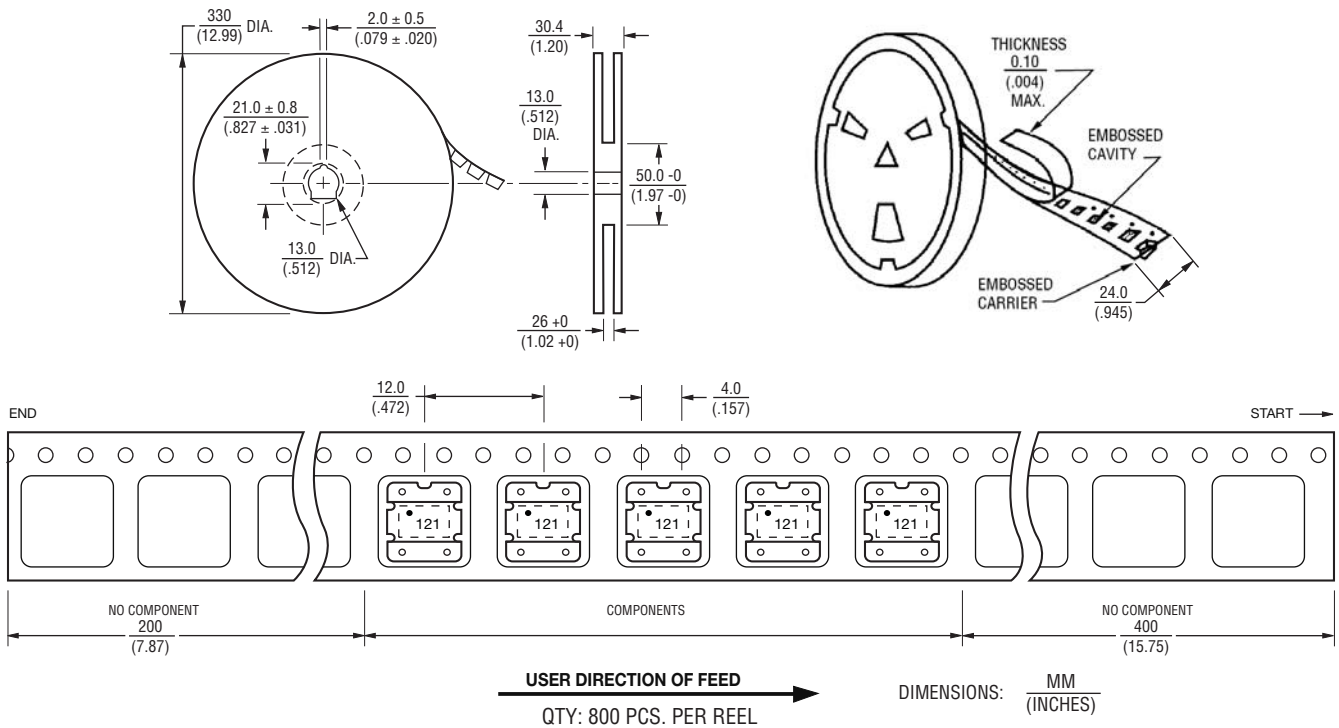
## Impedance Graph



MEASURING CIRCUIT



## Packaging Specifications



REV. 09/09

Specifications are subject to change without notice.

Customers should verify actual device performance in their specific applications

# Mouser Electronics

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[SRF1006-402Y](#) [SRF1006-502Y](#)