api technologies corp.
Spectrum Control

Miniature Solder-in Filters 9900 Series



These filters are ideal for microwave applications such as attenuators and oscillators, and perform well in high impedance circuits where large capacitance values are not practical.

Features

- Miniature size to allow effective use of space
- Standard capacitance values from 5pF to .033µF
- Voltage ratings to 200 VDC/115 VAC 0–400 Hz
- Hermetically sealed on one end allows for through-hole sealing between compartments
- High temperature construction meets MIL-F-28861 solderability and resistance to soldering heat requirements
- Available in MIL-C-11015 versions — see page CF10
- Gold plating compatible with gold bonding techniques

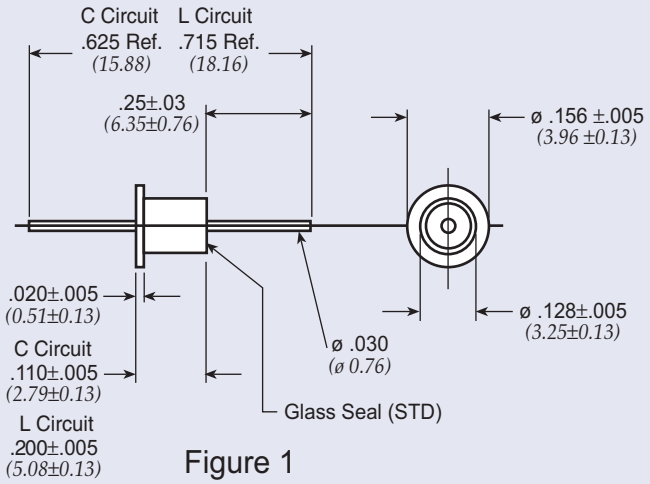


Figure 1

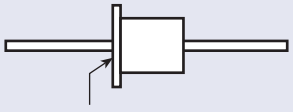


Figure 1 (Reverse)*

Dimensions in inches *(mm)*

Marking C Circuit

Color dot standard as follows:

- 101 Green – 100pF
- 501 Brown – 500pF
- 102 Purple – 1000pF
- 122 White – 1200pF
- 272 Red – 2700pF
- 502 Blue – 5000pF
- 153 Pink – 15000pF
- 000 None – 10pF max

Marking L Circuit

Color dot standard as follows:

- 100 Violet – 10pF
- 250 Blue – 25pF
- 102 White – 1000pF
- 152 White – 1500pF
- 502 Yellow – 5000pF
- 103 2White – .01µF
- 153 2White – .015µF
- 273 2Red – 27000pF
- 333 2Red – .033µF

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Miniature Solder-in C Circuit

Part Number*	Figure	Rated Voltage 125°C DC	Rated Voltage 125°C AC	I Amp	Min Cap	Minimum Insertion Loss (dB) 1 MHz	10 MHz	30 MHz	100 MHz	300 MHz	1 GHz	10 GHz
SCI-9900-153	1	50		5	0.015 µF	7	25	30	40	40	60	60
SCI-9900-303	1	50		5	0.030 µF	10	30	35	45	50	55	55
†SCI-9910-272	1	100		5	2700 pF	—	10	18	25	33	40	50
†SCI-9910-502	1	100		5	5000 pF	—	15	20	30	35	45	55
SCI-9900-000	1	200		5	4 pF max.	—	—	—	—	—	10	10
†SCI-9920-101	1	200	115	5	100 pF	—	—	—	3	10	20	28
†SCI-9920-501	1	200	115	5	500 pF	—	—	—	15	22	35	40
†SCI-9920-122	1	200	115	5	1200 pF	—	5	10	20	28	35	45

* For reverse glass seal add an “R” to the end of the part number (SCI-9900-153R).
† Also available through API’s authorized distributors.
Parts are RoHS Compliant

Miniature Solder-in L Circuit

Part Number*	Figure	Rated Voltage 125°C DC	I Amp	Min Cap	Minimum Insertion Loss (dB) 1 MHz	10 MHz	100 MHz	1 GHz	10 GHz
SCI-9980-100	1	200	10	10 pF	—	—	—	7	20
SCI-9980-101	1	200	10	100 pF	—	—	5	22	35
SCI-9980-102	1	200	10	1000 pF	—	8	25	40	42
SCI-9980-103	1	200	10	.01 uF	8	27	48	65	65
SCI-9980-122	1	200	10	1200 pF	—	8	28	42	50
SCI-9980-152	1	200	10	1500 pF	—	10	28	43	53
SCI-9980-153	1	200	10	.015 uF	10	28	50	65	65
SCI-9980-250	1	200	10	25 pF	—	—	—	13	25
SCI-9980-272	1	200	10	2700 pF	8	13	32	45	55
SCI-9980-273	1	50	10	27,000 pF	13	33	53	75	75
SCI-9980-333	1	200	10	.033 uF	13	35	55	75	75
SCI-9980-501	1	200	10	500 pF	—	—	18	37	38
SCI-9980-502	1	200	10	5000 pF	8	17	35	47	55

* Reverse seal available. Add R at the end of the part number. (SCI-9980-102R).
Note: Hi-rel versions available. Add R after the first dash. (SCI-R9980-102).
Lt circuit part number series SCI-9981-XXX.
Parts are RoHS Compliant