



CTS
TUSONIX[®]



*Ceramic EMI/RFI
Components*

**SHORT FORM
CATALOG**

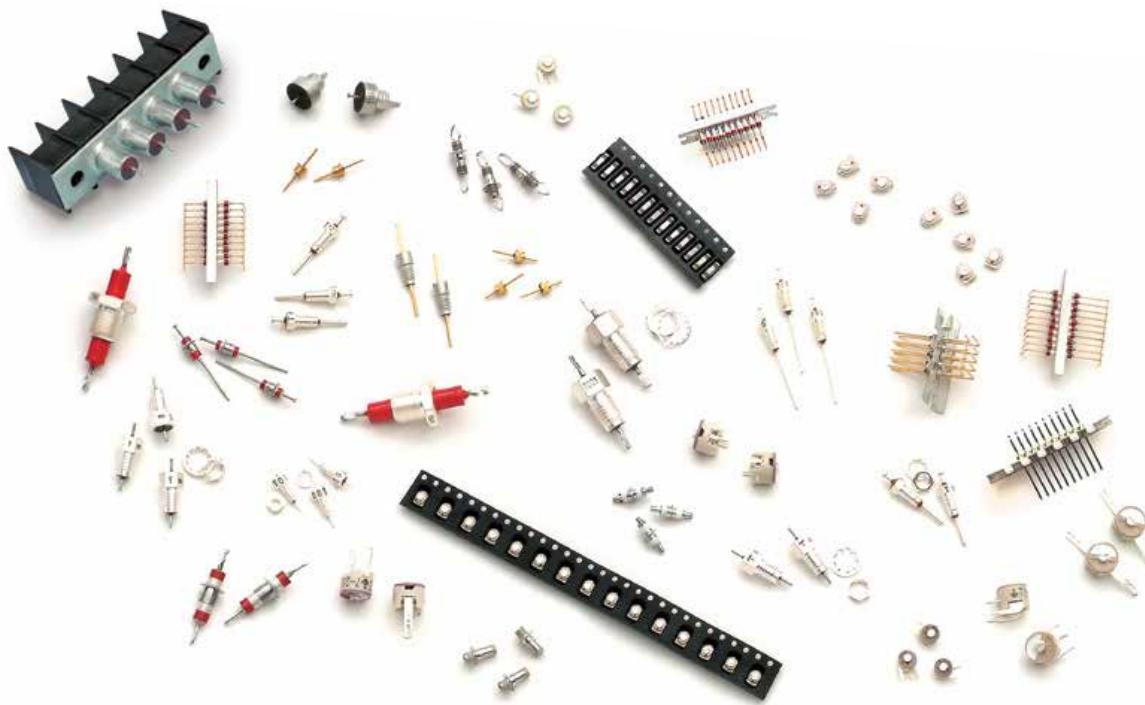


CTS TUSONIX Capabilities

CTS TUSONIX manufactures thousands of EMC Products and features an extensive line of EMI/RFI Filters and Capacitors. We combine Technology, Expertise, Versatility and Innovation to produce the industry's most complete line of ceramic EMI/RFI Filters. CTS TUSONIX draws upon its 50 plus years of manufacturing expertise and an accumulated base of ceramic dielectric technology to provide an ever expanding line of EMI/RFI Filters and Capacitors. These products not only set the industry standard, but lead the way in the development of tomorrow's EMI Technology.

CTS TUSONIX Quality

The CTS TUSONIX Quality Management System assures complete customer satisfaction. A fully equipped and approved Quality and Reliability Assurance Laboratory continually monitors product design and manufacturing integrity through its periodic Conformance Test Program. CTS TUSONIX also requires MIL testing for those products approved to MIL-PRF-81, MIL-C-11015 and MIL-PRF-15733.



Meeting Customer Requirements

CTS TUSONIX is devoted to bringing the company's broad product line to an ever expanding world market. CTS TUSONIX has the manufacturing experience and sophisticated equipment to provide customers full value for the products they purchase at competitive prices. CTS TUSONIX is ISO 9001-2008, UL Standard 1283 and 1059, and C-TPAT certified.

Circuits Available from CTS TUSONIX

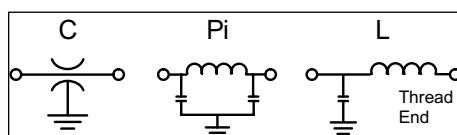


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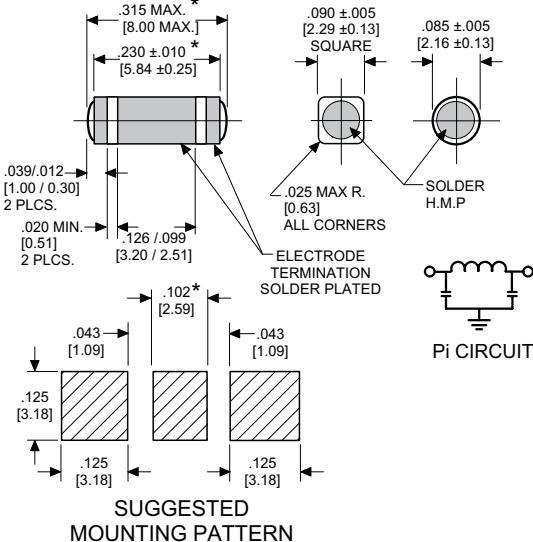
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The products listed in this catalog are only a few of the thousands of variations that CTS TUSONIX produces. For custom applications, please contact the factory.



Surface Mount Filters / Solder Mount Filters

4700 Series Surface Mount EMI Pi Filter



Part No.	WVDC		Cap. (pF)	Cap. Tol.	Typical No Load Insertion Loss dB @ 25°C per MIL-STD-220		
	85°C	125°C			10MHz	100MHz	1GHz
Square Filter							
4700-006	100	100	100	+80-20%	—	3	16
4700-009	100	100	470	+80-20%	1	16	40
4700-005	100	100	1,000	GMV	7	40	65
4700-003	100	100	2,000	GMV	10	45	70
4700-008	100	—	4,000	+80-20%	13	52	70
4701-002*	100	—	6,800	+80-20%	16	60	70
4701-001*	100	—	8,200	+80-20%	20	65	70
Round Filter							
4700-059	100	100	100	+80-20%	—	3	16
4700-058	100	100	1,000	GMV	7	40	65
4700-053	100	100	2,000	GMV	10	45	70
4700-053	100	—	5,000	+80-20%	15	55	70

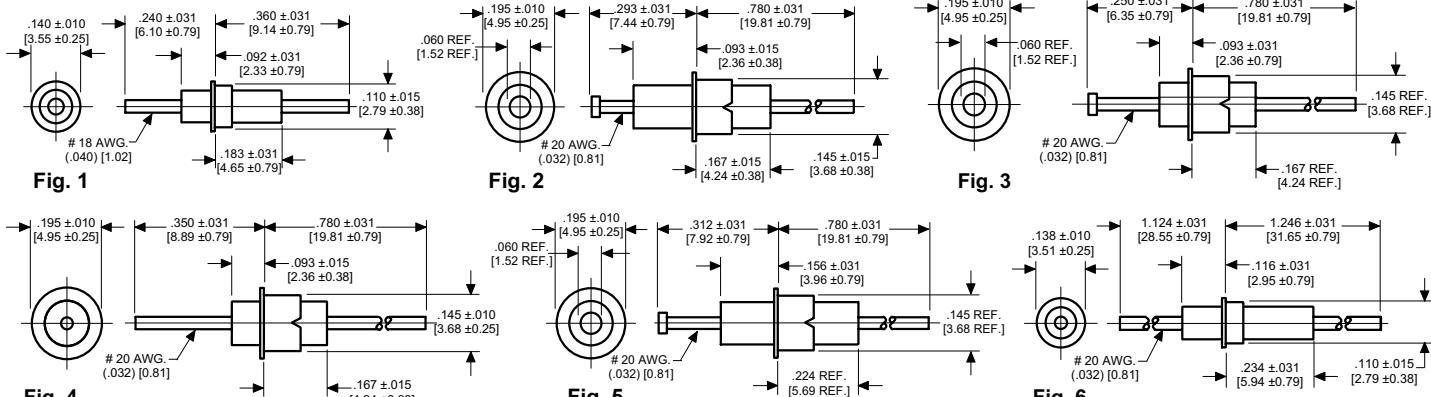
Additional Capacitance Values and Mounting Patterns are available upon request. Packaging is tape and reeled on a 16.00 mm tape.

*4701 variation has a body length of 0.336 ± 0.010 [8.53 ± 0.25] and a MAX. overall length of 0.394 [10] and 0.202 [5.13] length for the center rectangle of the mounting configuration. All other part dimensions are as shown.

GMV = Guaranteed Minimum Value

Download literature at <http://delivr.com/1iwgw>

Solder Mount EMI Pi Filters



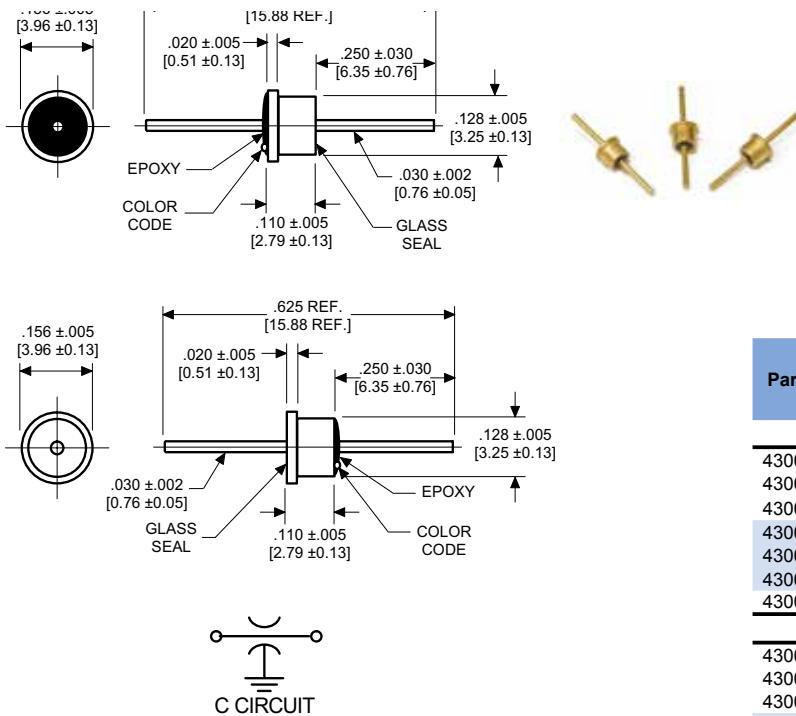
Part No.	Figure	WVDC		Cap. (pF)	Cap. Tol.	Typical No Load Insertion Loss dB @ 25°C per MIL-STD-220				
		85°C	125°C			1MHz	10MHz	100MHz	1GHz	10GHz
Square Filter										
4100-003	1	125	50	3,000	GMV	—	7	50	65	60
4151-000	3	100	70	12,000	GMV	—	25	70	65	65
4151-001	5	100	70	22,000	GMV	—	35	70	70	70
4100-000	6	250	125	1,500	GMV	—	6	45	60	60
4101-000	7	250	125	1,750	GMV	—	5	35	50	50
4101-002	2	250	125	1,750	GMV	—	5	50	60	60
4101-003	4	250	125	1,750	GMV	—	5	50	60	60
4101-502	8	—	125	1,750	GMV	—	—	50	60	60
4101-503*	8	—	125	1,750	GMV	—	—	50	60	60
4101-001*	8	350	200	1,500	GMV	—	3	45	70	70
4101-501	8	—	200	1,500	GMV	—	3	45	70	70
4102-000	—	350	200	3,000	GMV	—	8	55	65	65
4100-053	—	250	200	3,000	GMV	—	18	60	70	—
Round Filter										
MIL-PRF-15733	Figure	Part No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G	
/33-0001	8	4101-502	0.17 ± .027	0.78 ± 0.031	0.093 ± 0.015	0.288 ± 0.015	—	0.125 MAX [3.18 MAX]	0.19 ± 0.015	
/33-0002*	8	4101-503	0.25 ± 0.031	[4.32 ± 0.69]	[19.81 ± 0.79]	[2.36 ± 0.38]	[7.32 ± 0.38]			
/62-0001	8	4101-501	0.25 ± 0.031	[6.35 ± 0.79]	[10.31 ± 0.79]	[3.96 ± 0.79]	[7.92 ± 0.79]	[3.68 ± 0.38]	[4.83 ± 0.38]	

* MIL part number /33-0002 has a straight lead
• Same dimensions as /62-0001
■ Diagram not available

Reference Sample Kit #
SK4000-903

Miniature EMI Filters

4300 Series Miniature EMI Filter



Please Note: CTS TUSONIX can also supply the 4302 Series, which is epoxy sealed at both ends.

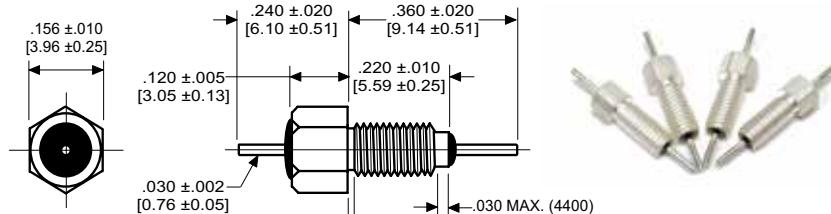
Reference Sample Kit # SK4000-903

CTS TUSONIX 4300 Series Miniature EMI Filters are ideal for applications where small size and high performance are critical. These C configured filters can be glass sealed on either one of the ends for optimal sealing between system compartments or components. The gold plating on the leads offers excellent conductivity and connective ability using common gold bonding methods. The small package and large range of electrical characteristics of the 4300 Series make it an effective solution for a variety of microwave applications.

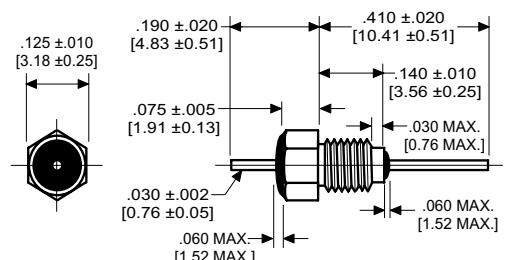
Part No.	WVDC		Cap. (pF)	Cap. Tol.	Typical No Load Insertion Loss dB @ 25°C per MIL-STD-220				
	85°C	125°C			1MHz	10MHz	100MHz	1GHz	10GHz
Epoxy Sealed Top (flange)/ Glass Sealed Bottom									
4300-006	70	50	15,000	GMV	7	20	35	40	55
4300-003	150	100	2,700	GMV	—	10	25	40	50
4300-004	150	100	5,000	GMV	—	15	30	45	55
4300-680	300	200	5	MAX	—	—	—	—	—
4300-000	300	200	100	GMV	—	—	3	20	28
4300-001	300	200	500	GMV	—	—	15	35	40
4300-002	300	200	1,200	GMV	—	5	20	35	45
Glass Sealed Top (flange)/ Epoxy Sealed Bottom									
4300-023	150	100	2,700	GMV	—	10	25	40	50
4300-024	150	100	5,000	GMV	—	15	30	45	55
4300-681	300	200	5	MAX	—	—	—	—	—
4300-020	300	200	100	GMV	—	—	3	20	28
4300-021	300	200	500	GMV	—	—	15	35	40
4300-022	300	200	1,200	GMV	—	5	20	35	45

GMV = Guaranteed Minimum Value

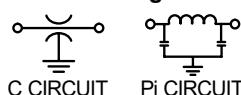
4400 Series Miniature EMI Bushing Mount Filter



4- 40 UNC - 2A Thread Standard Bushing



4- 40 UNC - 2A Thread Miniature Bushing



Please Note: CTS TUSONIX also produces many of the variations above in an L circuit.

Reference Sample Kit # SK4000-901

CTS TUSONIX 4400 Series Miniature EMI Filters are ideal for applications where small size and high performance are critical and a threaded mounting technique is desired. These C and L configured filters are available in two physical configurations and can be supplied with either unified or metric thread (see page 5 for metric.) The small package and large range of electrical characteristics of the 4400 Series make it an effective solution for a variety of microwave applications.

Download literature at <http://delivr.com/1jgj>

Part No.	WVDC		Cap. (pF)	Cap. Tol.	Typical No Load Insertion Loss dB @ 25°C per MIL-STD-220				
	85°C	125°C			1MHz	10MHz	100MHz	1GHz	10GHz
#4-40 UNC-2A Thread Standard Bushing, C Configuration									
4400-016*	50	50	50,000	GMV	15	35	45	70	—
4400-033	150	100	2,700	GMV	—	10	25	40	50
4400-034	150	100	5,000	GMV	—	15	30	45	55
4400-030	300	200	100	GMV	—	—	3	20	28
4400-031	300	200	500	GMV	—	—	15	35	40
4400-037	300	200	1,000	GMV	—	5	20	35	45
4400-032	300	200	1,200	GMV	—	5	20	35	45
#4-40 UNC-2A Thread Miniature Bushing, C Configuration									
4403-033	150	100	2,700	GMV	—	10	25	40	50
4403-034	150	100	5,000	GMV	—	15	30	45	55
4403-030	300	200	100	GMV	—	—	3	20	28
4403-031	300	200	500	GMV	—	—	15	35	40
4403-037	300	200	1,000	GMV	—	5	20	35	45
4403-032	300	200	1,200	GMV	—	5	20	35	45

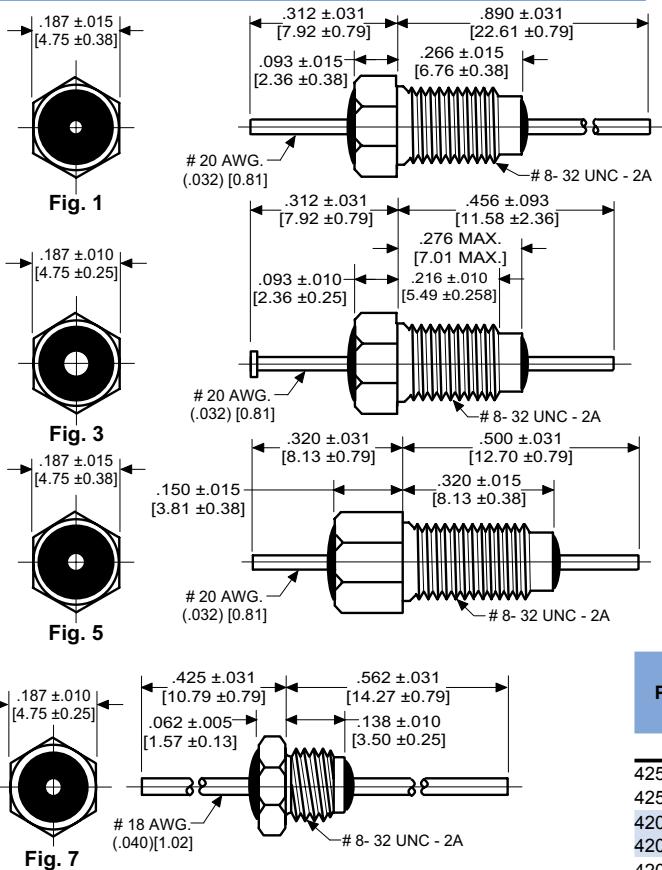
#4-40 UNC-2A Thread Pi Configuration	#4-40 UNC-2A Thread Pi Configuration				
	85°C	125°C	1MHz	10MHz	100MHz
4261-001■	—	50	5,500	GMV	—

The products listed in this catalog are only a few of the thousands of variations that CTS TUSONIX produces. For custom applications, please contact the factory.

Bushing Mount EMI Filters

Download literature at <http://delivr.com/1jgif>

#8-32 Thread Bushing Mount Filters



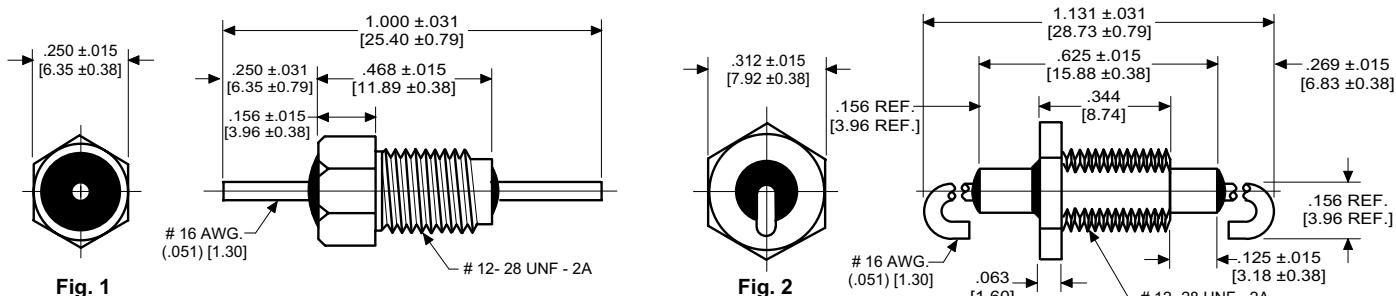
Reference Sample Kit # SK4000-900

- ◆ Turret Lead
- 0.18 AWG 0.040 [1.02] Lead
- * Insertion loss values are typical

GMV = Guaranteed Minimum Value

Part No.	Fig.	WVDC		Cap. (pF)	Cap. Tol.	Minimum No Load Insertion Loss dB @ 25°C per MIL-STD-220				
		85°C	125°C			1MHz	10MHz	100MHz	1GHz	10GHz
#8-32 UNC-2A Thread Pi Configuration										
4251-004	5	100	100	28,000	GMV	10	38	75	75	75
4251-000	4	185	125	3,000	+100-0%	—	10	30	65	65
4201-502	3	—	100	1,000	GMV	—	—	65	70	70
4201-000	1	200	100	1,500	GMV	—	55	45	65	70
4201-001♦	1	200	100	1,500	GMV	—	—	45	65	70
4201-501♦	1	—	100	2,500	GMV	—	14	45	60	60
4201-050	1	200	100	5,500	GMV	—	14	55	70	70
4201-051♦	1	200	100	5,500	GMV	—	14	55	70	70
4201-053♦■	1	200	100	5,500	GMV	—	5	55	65	65
4205-001	7	250	125	1,500	GMV	—	5	35	60	60
#8-32 UNC-2A Thread C Configuration										
2425-018-X5U0-102P*	2	200	100	1,000	+100-0%	—	3	20	35	40
2425-601-X5W0-103Z*	6	200	100	10,000	+80-20%	—	20	35	50	55

#12-28 Thread Feed-Through Capacitors



Reference Sample Kit # SK2000-900

Part No.	Fig.	WVDC		Cap. (pF)	Cap. Tol.	Minimum No Load Insertion Loss dB @ 25°C per MIL-STD-220				
		85°C	125°C			10MHz	100MHz	1GHz	10GHz	
#12-28 Thread C Configuration										
2499-003-X5U0-102P	1	500	250	1,000	+100-0%	3	20	35	40	
2499-003-X5W0-502P	1	500	250	5,000	+100-0%	15	30	45	50	
2499-003-X5W0-103Z	1	500	250	10,000	+80-20%	20	35	50	55	
0357-001-X5W0-103Z	2	500	250	10,000	+80-20%	20	35	50	55	

Bushing Mount EMI/RFI Filters continued

Download literature at <http://delivr.com/1jgjf>

#12-32 and 5/16-32 Thread Bushing Mount Filters

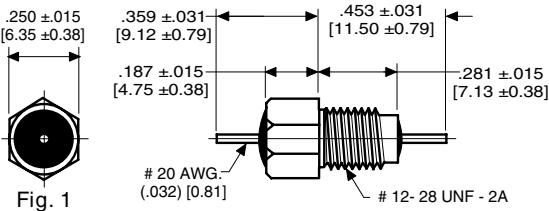


Fig. 1

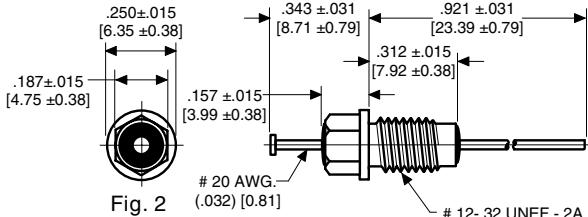


Fig. 2

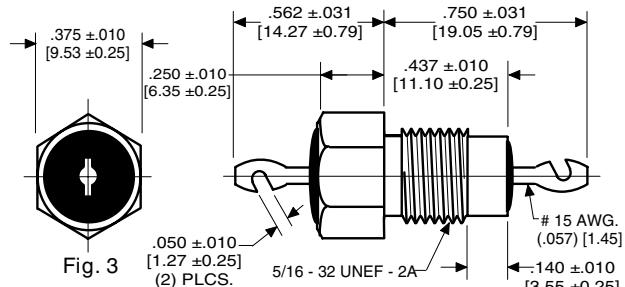


Fig. 3

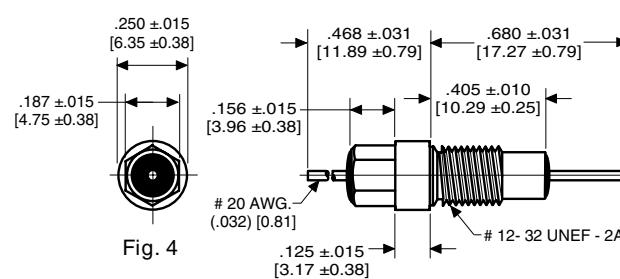


Fig. 4

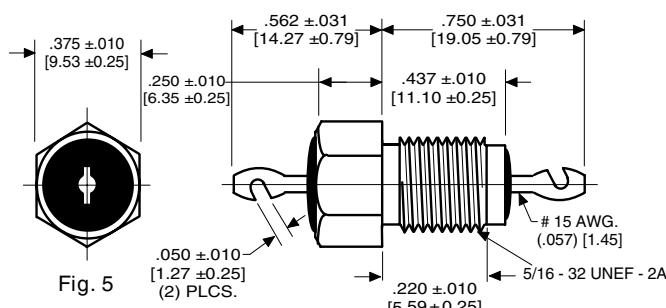


Fig. 5

* 5/16-24 UNF - 2A

Reference Sample Kit # SK4000-902

Part No.	Fig.	WVDC 85°C 125°C	Cap. (pF)	Cap. Tol.	Minimum No Load Insertion Loss dB @ 25°C per MIL-STD-220				
					10MHz	100MHz	1GHz	10GHz	
#12-32 Thread Pi Configuration									
4253-002	4	100	70	50,000	GMV	15	60	75	75
4202-050	1	200	100	5,000	GMV	—	20	65	70
4203-053	2	200	100	5,000	GMV	—	20	65	70
4202-000	1	350	200	1,500	GMV	—	555	45	70
4203-003	2	350	200	1,500	GMV	—	14	45	70
4202-004	1	500	350	2,500	GMV	—	5	50	70
4203-552	2	—	100	5,000	GMV	—	—	65	70
5/16"-32 Thread Pi Configuration									
4206-501	3	—	500	2,000	GMV	—	—	55	70
4206-502*	3	—	500	2,000	GMV	—	—	55	70
4206-006	5	1000	500	3,000	GMV	—	10	55	70

GMV = Guaranteed Minimum Value

Metric Bushing Filters

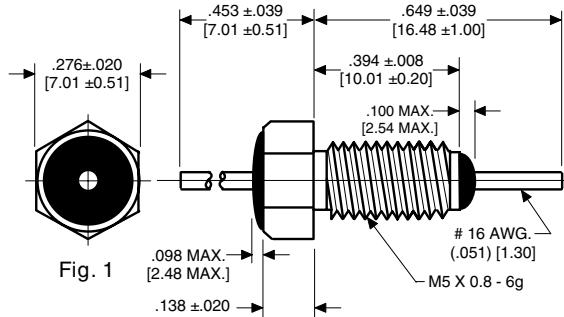


Fig. 1

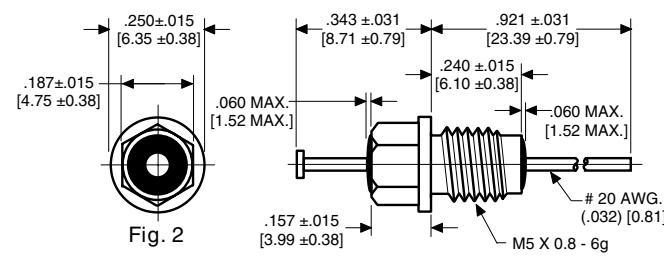


Fig. 2

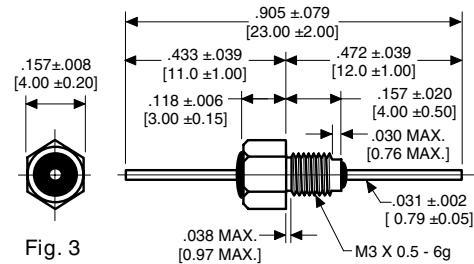


Fig. 3

Part No.	Fig.	WVDC 85°C 125°C	Cap. (pF)	Cap. Tol.	Minimum No Load Insertion Loss dB @ 25°C per MIL-STD-220				
					1MHz	10MHz	100MHz	1GHz	10GHz
M3 Thread C Configuration									
4400-099	3	50	50	50,000	GMV	15	35	45	70
4400-093	3	70	50	10,000	GMV	4	21	35	50
4400-098	3	70	50	27,000	GMV	10	28	42	65
4400-097	3	150	100	2,700	GMV	—	10	25	40
4400-094	3	150	100	4,700	GMV	—	15	30	45
4400-683	3	300	200	5	MAX	—	—	—	—
4400-076	3	300	200	100	GMV	—	—	3	28
4400-096	3	300	200	470	GMV	—	—	15	40
4400-095	3	300	200	1,000	GMV	—	5	20	35
M5 Thread Pi Configuration									
4209-053	2	350	100	5500	GMV	—	20	65	70
4209-003	2	350	200	1500	GMV	—	5	45	70

2499-523-Y5R0-102*	1	500	250	1,000	+100-0%	—	3	20	35	40
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* Insertion loss values are typical.

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Coaxial Broadband Filters / Coaxial Resonators

Coaxial Broadband Filters

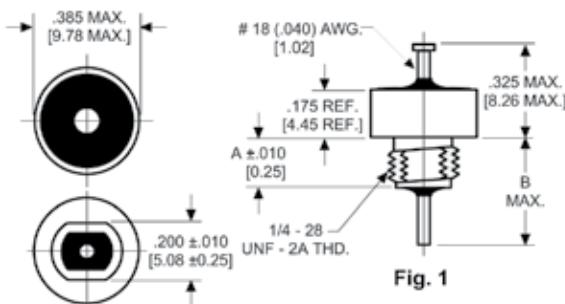


Fig. 1

Download literature at <http://delivr.com/1jgif>

Hermetic Seal

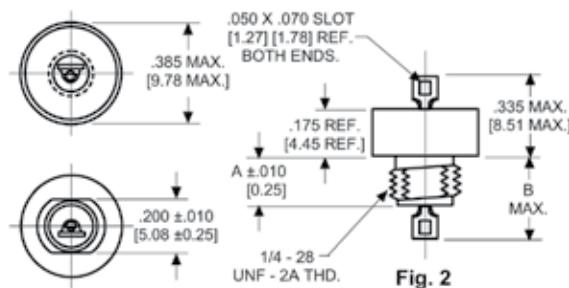


Fig. 2

Part No.	Fig.	Dim. A	Dim. B	WVDC		Cap. (pF)	Minimum No Load Insertion Loss dB @ 25°C per MIL-STD-220			
				85°C	125°C		30kHz	300kHz	10MHz	1GHz
Coaxial Broadband Filter C Configuration										
4600-000	1	0.187 [4.75]	0.367 [9.32]	100	70	1.4	15	34	60	70
4601-000	2	0.187 [4.75]	0.35 [8.89]	100	70	1.4	15	34	60	70
4600-003	1	0.187 [4.75]	0.367 [9.32]	100	50	1.4	15	34	60	70
Coaxial Broadband Filter L Configuration										
4600-050	1	0.187 [4.75]	0.367 [9.32]	100	70	1.4	15	34	60	70
4601-050	2	0.187 [4.75]	0.35 [8.89]	100	70	1.4	15	34	60	70
4600-053	1	0.187 [4.75]	0.367 [9.32]	100	50	1.4	15	34	60	70
4601-055	2	0.187 [4.75]	0.35 [8.89]	100	70	0.7	9	29	52	70
4600-059	1	0.187 [4.75]	0.367 [9.32]	280*	200	0.15	—	15	40	60
4601-059	2	0.187 [4.75]	0.35 [8.89]	280*	200	0.15	—	15	40	60

* 125V_{AC} to 400Hz; DCR - 0.01Ω MAX

Coaxial Resonators

CTS TUSONIX's Ceramic Coaxial Resonators are offered in three sizes and four dielectric constants with a frequency range from 800MHz to 5.9GHz. Please inquire about different sizes with your local sales associate.

To ensure superior performance and adequate miniaturization, these parts are made of quality metallized ceramics. CTS TUSONIX offers the best ceramic composition in order to meet all necessary temperature performance, shielding and miniaturization requirements for an endless number of applications.

Create A Part Number

Coaxial Resonator	Square Tin Plated Style	Height in mm	Electrode, Fired on Silver Tin-plated over Nickel=0	Tab, 0=no 1=Soldered 2=Unsoldered	Wave Type - Table 2	Resonant Frequency in MHz	Dielectric Material - Table 2	Temperature Coefficient of Resonant Frequency +10 PPM	Resonant Frequency Tolerance +1%	Packaging Code - Tray (1) or Tape/Reel (2)
6 0	03	0	0	2	4600	E		0	C	1

Part No. Example : 6003-014-1750-E0C1

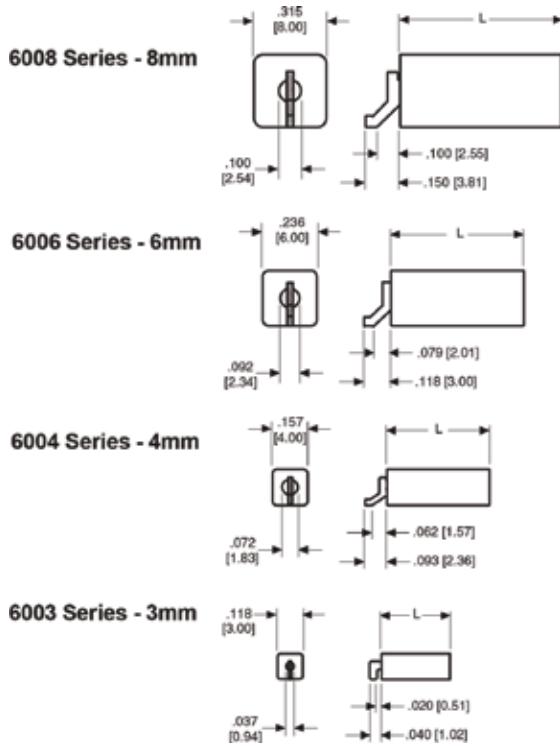
Table 1

2 - Half
4 - Quarter

Table 2*

D	(Er)
E	10
F	20
G	37
H	85

*Nominal values

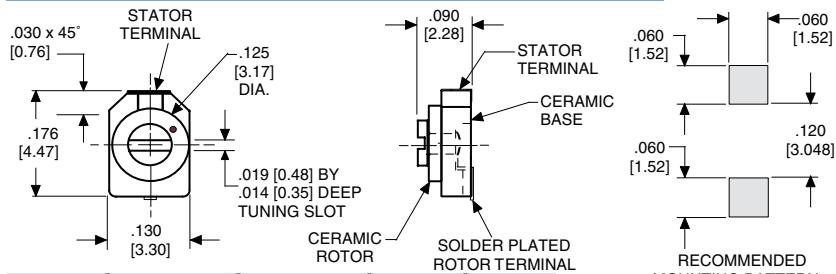


Download literature at <http://delivr.com/2pk4m>

Variable Trimmer Capacitors

Download literature at <http://delivr.com/2jdvc>

Extra Miniature Trimmer Capacitors - McQ512



Part No.	Dielectric Type Code	Temp. COEF. PPM/°C	WVDC @125°C	Q Min.
0512-000	A	NPO ±200	100	750
0512-000	A	NPO ±200	100	750
0512-000	A	NPO ±400	100	500
0512-000	A	NPO ±400	100	500

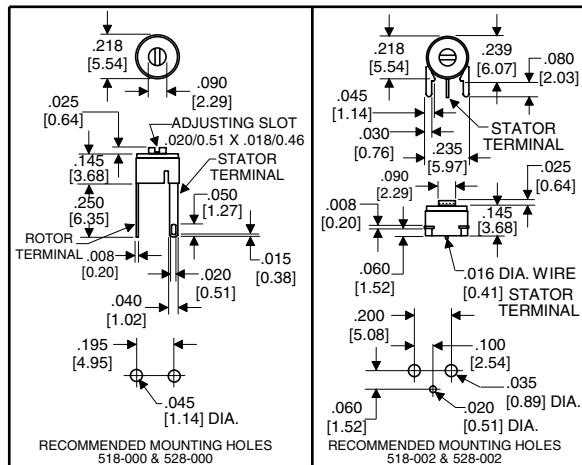


Actual Size

Please contact the factory direct for capacitance ranges.

Reference Sample Kit # SK0500-900

Miniature Trimmer Capacitors

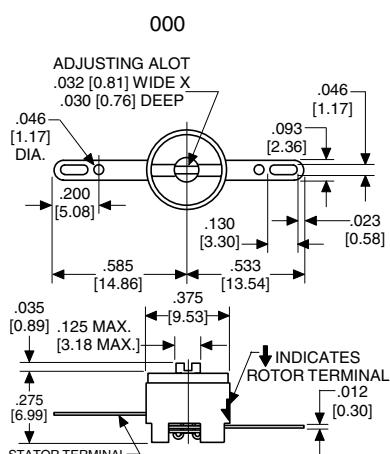


Part No.	MIL-PRF-81 Designation MIL CV35 CTS TUSONIX Style 518-016	Type Code	Cap. (pF)	CTS TUSONIX Part Number	MIL-PRF-81 Designation MIL CV36 CTS TUSONIX Style 518-017	Type Code	Cap. (pF)
518 Series Trimmer - 100 WVDC@85°C							
518-000	CV35A030	A	1.0-3	518-002	CV36A030	A	1.25-3
518-000	CV35A090	A	2.5-9	518-002	CV36A090	A	2.5-9
518-000	CV35A150	A	5.0-15	518-002	CV36A150	A	5.0-15



Actual Size

Part No.	Dielectric Type Code	Cap. (pF)	WVDC @125°C
528 Series Trimmer			
528-000	A	1-3	100
528-000	A	3-8	100
528-002	A	1.25-3	100
528-002	C	3.5-10	100



MIL-PRF-81 Designation MIL CV31 CTS TUSONIX Style 538-054	MIL-PRF-81 Designation MIL CV31 CTS TUSONIX Style 538-067	Dielectric Type Code	Cap. (pF)	WVDC @85°C
538 Series Trimmer				
CV31A080	CV32A080	A	2.0 - 8	350
-	-	A	3.0 - 10	350
CV31D150	CV32D150	D	3.0 - 15	200
CV31A180	CV32A180	A	5.5 - 18	350
-	-	D	5.5 - 25	200
CV31C250	CV32C250	C	8.0 - 25	350
CV31E600	CV32E600	F	15.0 - 60	200



Actual Size

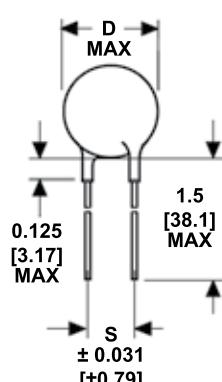
Reference Sample Kit # SK0500-900

The products listed in this catalog are only a few of the thousands of variations that CTS TUSONIX produces. For custom applications, please contact the factory.

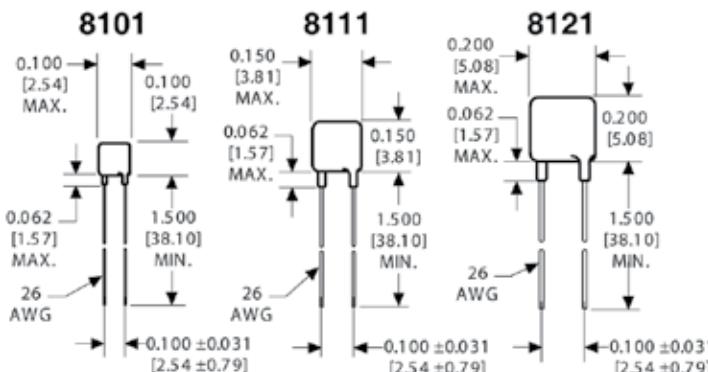


Ceramic Disc and WEECON Capacitors

Ceramic Disc Capacitors



Ceramic WEECON® Capacitors



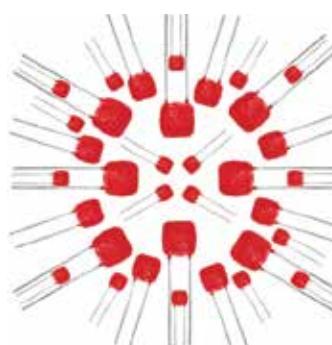
CTS TUSONIX WEECON® Ceramic Plate Capacitors are the ideal product when it comes to demanding applications that need exact temperature compensation or very small and accurate capacitance values.

CTS TUSONIX offers WEECON® Capacitors with temperature compensating dielectrics from NPO through N5600 and capacitance values from 1 pF to 12,000 pF for the temperature compensating dielectrics and up to 0.082 µF for Z5U ceramic dielectrics. Capacitance tolerance from 0.1 pF at a nominal capacitance of less than 10 pF or from 1 percent for nominal capacitance values of greater than 10 pF are available. Please refer to the Ceramic Capacitor Catalog 800 for further details.

WEECON®'s are encapsulated with a hard, bright polymeric coating, which is formulated to provide mechanical protection under normal environmental conditions.

Part No.	MIL Number	Dimension D	Dimension S	Wire Gauge
Ceramic Disc Capacitors				
801-000-X5F0-102K	-	0.36 [9.14]	0.25 [6.35]	22
MIL-C-11015 Approved Discs				
838-040-X5U0-471M	CK60AW471M	0.28 [7.11]	0.25 [6.35]	22
838-040-X5U0-102M	CK60AW102M	0.28 [7.11]	0.25 [6.35]	22
831-040-X5U0-152M	CK60AW152M	0.28 [7.11]	0.25 [6.35]	22
838-040-X5R0-221K	CK60AX221K	0.28 [7.11]	0.25 [6.35]	22
831-040-X5R0-471K	CK60AX471K	0.28 [7.11]	0.25 [6.35]	22
838-040-X7R0-150K	CK60BX150K	0.28 [7.11]	0.25 [6.35]	22
838-040-X7R0-470K	CK60BX470K	0.28 [7.11]	0.25 [6.35]	22
838-040-X7R0-101K	CK60BX101K	0.28 [7.11]	0.25 [6.35]	22
801-040-X5U0-222M	CK61AW222M	0.35 [8.89]	0.25 [6.35]	22
811-040-X5U0-682M	CK62AW682M	0.55 [13.97]	0.375 [9.52]	22
811-040-X7R0-102K	CK62BX102K	0.55 [13.97]	0.375 [9.52]	22
841-040-X5U0-103M	CK63AW103M	0.66 [16.76]	0.375 [9.52]	20
848-040-X5U0-472M	CK63AW472M	0.66 [16.76]	0.375 [9.52]	20
848-040-X5U0-103M	CK63AY103M	0.66 [16.76]	0.375 [9.52]	20

Part No.	Cap. (pF)	Tol.
C0G (NPO) Ultra-Stable		
8101-A100-C0K0-109B	1.0	±0.1 pF
8101-A100-C0K0-159B	1.5	±0.1 pF
8101-A100-C0K0-189B	1.8	±0.1 pF
8101-A100-C0J0-229B	2.2	±0.1 pF
8101-A100-C0J0-229C	2.2	±0.25 pF
8101-A100-C0J0-279C	2.7	±0.25 pF
8101-A100-C0J0-339B	3.3	±0.1 pF
8101-A100-C0J0-339C	3.3	±0.25 pF
8101-A100-C0J0-399B	3.9	±0.1 pF
8101-A100-C0J0-399C	3.9	±0.25 pF
8101-A100-C0H0-479C	4.7	±0.25 pF
8101-A100-C0H0-479D	4.7	±0.5 pF
8101-A100-C0H0-569C	5.6	±0.25 pF
8101-A100-C0H0-569D	5.6	±0.5 pF
8101-A100-C0H0-689C	6.8	±0.25 pF
8101-A100-C0H0-689D	6.8	±0.5 pF
8101-A100-C0H0-829C	8.2	±0.25 pF
8101-A100-C0H0-829D	8.2	±0.5 pF
8101-A100-C0G0-100C	10	±0.25 pF
8101-A100-C0G0-100D	10	±0.5 pF
8101-A100-C0G0-120J	12	5%
8101-A100-C0G0-150K	15	10%
8101-A100-C0G0-150J	15	5%
8101-A100-C0G0-180J	18	5%
8111-A100-C0G0-220K	22	10%
8111-A100-C0G0-220J	22	5%
8111-A100-C0G0-330K	33	10%
8111-A100-C0G0-330J	33	5%
8111-A100-C0G0-470K	47	10%
8111-A100-C0G0-470J	47	5%
8121-A100-C0G0-560J	56	5%
8121-A100-C0G0-680J	68	5%
8121-A100-C0G0-101K	100	10%
X7R Stable		
8101-A100-X7R0-221K	220	±10%
8101-A100-X7R0-271K	270	±10%
8101-A100-X7R0-331K	330	±10%
8101-A100-X7R0-471K	470	±10%
8111-A100-X7R0-102K	1,000	±10%
8121-A100-X7R0-332K	3,300	±10%



Quick Connect Assembly Plates

Download literature at <http://delivr.com/1h3fs>

Plate Style 77

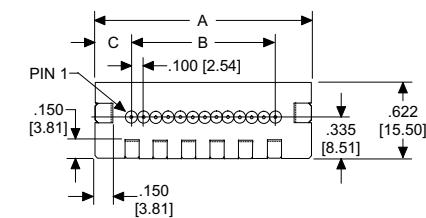
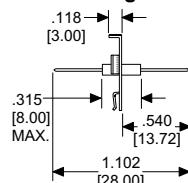
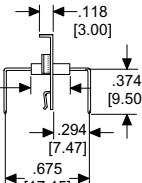
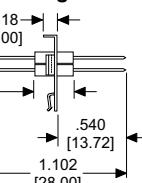
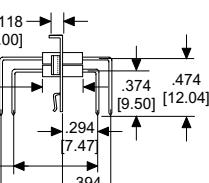
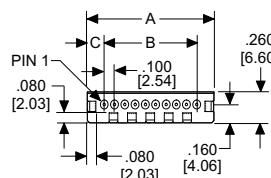
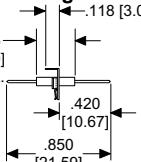
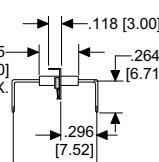
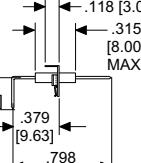
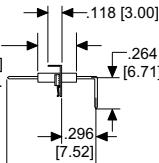

Straight

90° Both

Straight

90° Both


Plate Style 78


Straight

90° Both

90° Left

90° Right


Style 77 Dimension "C"

Ref.#	A Length	No. of Lines per Row*	Dimension C
0	1.092 [27.74]	1-2	0.496 [12.60]
		3-4	0.396 [10.06]
		5-6	0.296 [7.52]
1	1.812 [46.02]	1	0.906 [23.01]
		2-3	0.806 [20.47]
		4-5	0.706 [17.93]
		6-7	0.606 [15.39]
		8-9	0.506 [12.85]
		10-11	0.406 [10.31]
		12-13	0.306 [7.77]

Style 78 Dimension "C"

Ref.#	A Length	No. of Lines per Row*	Dimension C
0	0.990 [25.15]	2-3	0.395 [10.03]
		4-5	0.295 [7.49]
		6-7	0.195 [4.95]
1	1.240 [31.49]	1-2	0.570 [14.48]
		3-4	0.470 [11.94]
		5-6	0.370 [9.40]
		7-8	0.270 [6.86]
		9-10	0.170 [4.32]

*When ordering a Miniature Quick Connect or another plate with a single row of filters, use the designation for the bottom row in the part number and enter a value of 00 in the top row of the part number.

**To select different filter values please provide CTS TUSONIX with a table showing where each Filter will mount. Example:

A	A	S	S	S
A	A	S	S	S

Filter Performance

Part No.	Circuit	Capacitance		Typical No Load Insertion Loss dB @ 25°C per MIL-STD-220							
		Value	Tolerance	5MHz	10MHz	20MHz	50MHz	100MHz	200MHz	500MHz	1GHz
A	C	68pF	+80/-20%	—	—	—	—	—	3	10	16
B	C	100pF	+80/-20%	—	—	—	—	—	1	6	14
C	C	135pF	+100-0%	—	—	—	1	5	10	16	20
D	C	470pF	+80/-20%	—	—	2	7	12	17	23	27
E	C	820pF	+80/-20%	—	2	6	12	18	23	29	33
F	C	1,000pF	+80/-20%	—	3	7	14	20	25	31	35
G	C	1,500pF	+80/-20%	1	5	10	16	22	27	33	37
H	C	2,500pF	+100-0%	5	10	15	21	25	32	36	40
K	C	4,000pF	+100-0%	9	15	20	25	30	34	41	45
N	Pi	68pF	+80/-20%	—	—	—	—	1	5	15	20
O	Pi	100pF	+80/-20%	—	—	—	—	2	9	22	28
P	Pi	135pF	+100-0%	—	—	—	1	5	16	24	32
Q	Pi	470pF	+80/-20%	—	—	—	9	18	22	36	43
R	Pi	820pF	+80/-20%	—	—	3	13	22	30	42	50
S	Pi	1,000pF	+80/-20%	—	2	7	16	24	36	48	55
T	Pi	1,700pF	+100-0%	1	6	14	28	35	48	60	70
U	Pi	2,500pF	+100-0%	3	9	16	28	41	52	62	70
V	Pi	5,000pF	+100-0%	7	14	27	41	53	66	70	70

X Filter Characteristics are determined by the customer.

Y	Insul.	10pF	Max.	—	—	—	—	—	—	—	—
Z	Gnd Pin	—	—	—	—	—	—	—	—	—	—

The part number shown below represents the Quick Connect 1.812 length with two rows of seven lines per row. The filters are Pi circuits with a capacitance of 1000pF and straight leads. 7712-0707-SA

77	1	2	07	07	S	A
Plate style	Plate Length	Filter Type	Bottom Row*	Top Row	Cap Value**	Lead Configuration
77=Quick Connect 78=Miniature QC 79=Standard	Ref. # from drawings above	C=1 Pi=2	Number of Filters	Number of Filters	See Table above	A=Straight B=90° Right C=90° Left D=90° Both

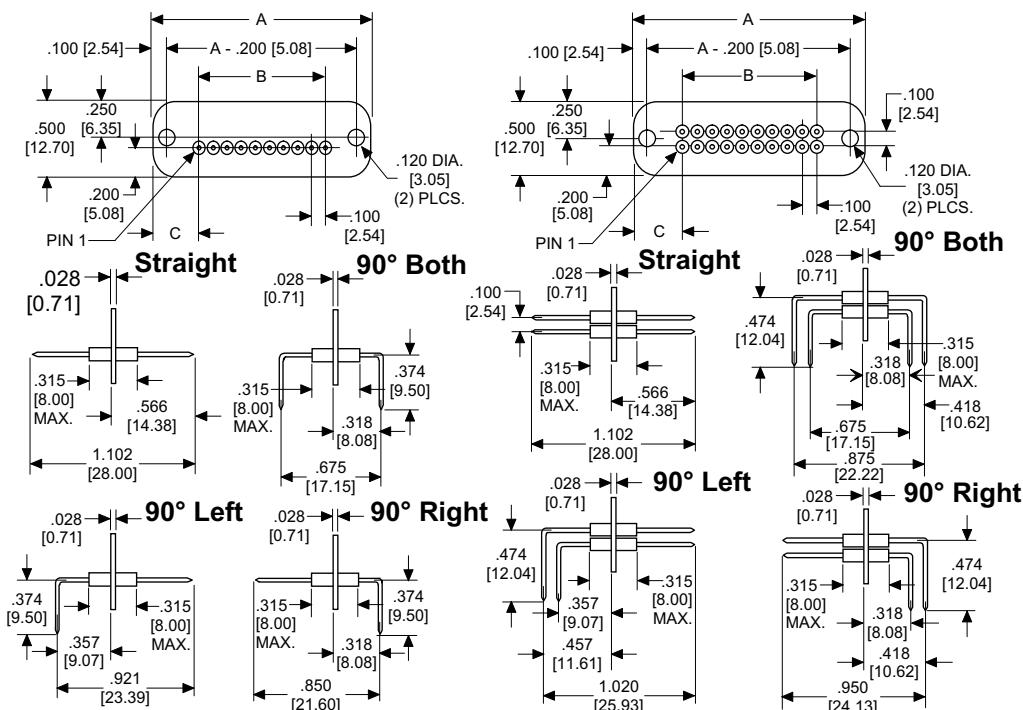
To request custom filtering, mechanical or material requirements not shown here, please contact our Customer Service Department at (508) 435-6831.

The products listed in this catalog are only a few of the thousands of variations that CTS TUSONIX produces. For custom applications, please contact the factory.



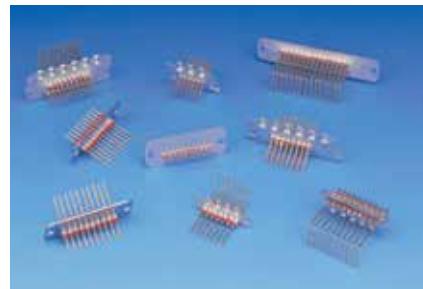
Quick Connect Assembly Plates / Filtered Terminal Blocks

Plate Style 79



Style 79 Dimension "C"

Ref.#	A Length	No. of Lines per Row*	Dimension C
0	1.06 [26.92]	1 2-3 4-5	0.53 [13.46] 0.43 [10.92] 0.33 [8.38]
1	1.56 [39.62]	1-2 3-4 5-6 7-8 9-10	0.73 [18.54] 0.63 [16.00] 0.53 [13.46] 0.43 [10.92] 0.33 [8.38]
2	2.56 [65.02]	5-6 7-8 9-10 11-12 13-14 15-16 17-18 19-20	1.03 [26.16] 0.93 [23.62] 0.83 [21.08] 0.73 [18.54] 0.63 [16.00] 0.53 [13.46] 0.43 [10.92] 0.33 [8.38]



UL Recognized Filtered Terminal Blocks

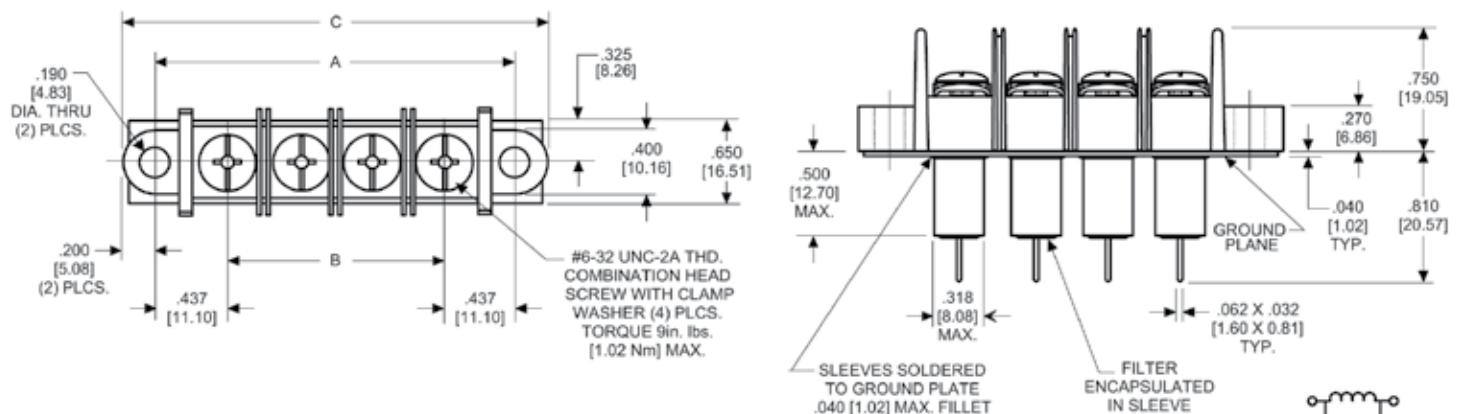


Figure 1: UL Recognized Terminal Block

EMI Filters recognized to UL Standard 1283;

Terminal Block Recognized to UL Standard 1059

(Reference UL file Number E201344.)

Operating Temperature: -40°C to +105°C

Working Voltage: 250V_{AC}

Capacitance: 2000pF MIN.

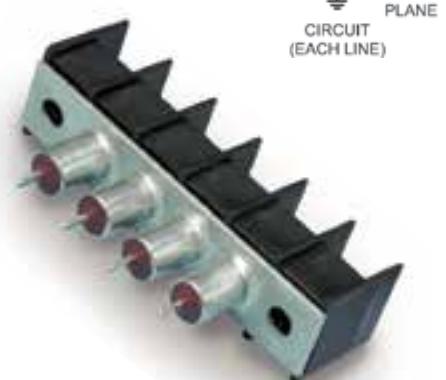
IR: Minimum 10,000 MΩ

Current Rating: 20A

DC Resistance: 10 miliΩ MAX.

Download literature at <http://delivr.com/2utfm>

Part No.	Fig.	Dim. A	Dim. B	Dim. C
7602-501	2	1.312 [33.32]	0.437 [11.1]	1.71 [43.43]
7603-501	3	1.75 [44.45]	0.874 [22.2]	2.15 [54.61]
7604-501	4	2.188 [55.58]	1.311 [33.3]	2.59 [65.79]
7605-501	5	2.62 [66.68]	1.748 [44.4]	3.02 [76.71]
7606-501	6	3.063 [77.8]	2.185 [55.55]	3.46 [87.88]



Part Number Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
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512-000 Series	7	2499-003 Series	4	4202-004	5	4300-022	3	4403-031	3	4700-059	2
512-001 Series	7	2499-523-Series	4	4202-050	5	4300-023	3	4403-032	3	4701-001	2
512-019 Series	7	4100-000	2	4203-003	5	4300-024	3	4403-033	3	4701-002	2
518-000 Series	7	4100-003	2	4203-053	5	4300-680	3	4403-034	3	6003 Series	6
518-002 Series	7	4100-053	2	4203-552	5	4300-681	3	4403-037	3	6004 Series	6
528-000 Series	7	4101-000	2	4205-001	5	4400-016	3	4600-000	6	6006 Series	6
528-002 Series	7	4101-001	2	4206-006	5	4400-030	3	4600-003	6	6008 Series	6
538-000 Series	7	4101-002	2	4206-501	5	4400-030	3	4600-050	6	7602-501	10
538-002 Series	7	4101-003	2	4206-502	5	4400-032	3	4600-053	6	7603-501	10
538-006 Series	7	4101-502	2	4209-003	5	4400-033	3	4600-059	6	7604-501	10
538-011 Series	7	4101-503	2	4209-053	5	4400-034	3	4601-000	6	7605-501	10
538-026 Series	7	4102-000	2	4251-000	4	4400-037	3	4601-050	6	7606-501	10
538-074 Series	7	4151-000	2	4251-004	4	4400-076	5	4601-055	6	77XX -Series	9
801-000 Series	8	4151-001	2	4253-002	4	4400-093	5	4601-059	6	78XX -Series	9
801-040 Series	8	4201-000	4	4300-000	3	4400-093	5	4700-003	2	79XX -Series	9
811-040 Series	8	4201-001	4	4300-001	3	4400-095	5	4700-005	2	8101-A100-Series	8
831-040 Series	8	4201-050	4	4300-002	3	4400-096	5	4700-006	2	8111-A100-Series	8
838-040 Series	8	4201-051	4	4300-003	3	4400-097	5	4700-008	2	8121-A100-Series	8
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848-040 Series	8	4201-501	4	4300-006	3	4400-099	5	4700-053	2		
2425-018	4	4201-502	4	4300-020	3	4400-683	5	4700-056	2		

MIL Cross Reference

FILTERS			TRIMMER CAPACITORS		DISC CAPACITORS	
MIL-PRF-15733	Part No.	Page	MIL-PRF-81	Page	MIL-C-11015	Page
/28-0001	4201-501	4	CV315	7	CK60	8
/33-0001	4101-502	2	CV32	7	CK61	8
/33-0002	4101-503	2	CV35	7	CK62	8
/61-0003	4206-502	5	CV36	7	CK63	8
/61-0004	4206-501	5				
/61-0007	4203-552	5				
/61-0008	4201-502	4				
/62-0001	4101-501	2				

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