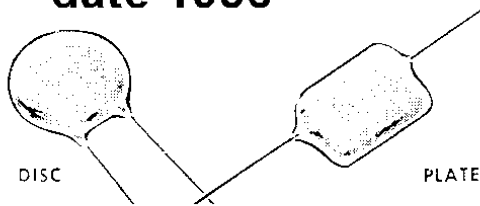


Sprague Cera-mite Ceramic Capacitors

Radio Electronic Master Catalog

date 1956

www.33audio.com



2 The "circle-deuce" logo is an industrial code for Sprague

- Tiny, Tough, Dependable In Every Application
- Low Self-inductance Of Silvered Flat-plate Design Means Very High By-pass Efficiency In All TV Circuits
- Flat-plate Construction Permits Higher Self-resonant Frequency Than Tubular Ceramic Or Molded Mica Capacitors
- Tough Moisture-proof Coating Protects Against Short-circuiting And Assures Good Performance Under Severe Conditions Of Humidity And Vibration
- Cera-mite Capacitors Easily Fit Into Tight Spaces, Even Across Subminiature Tube Sockets
- Designed For 85 °C (185 °F) Continuous Operation

★Trademark

GENERAL APPLICATION TYPES

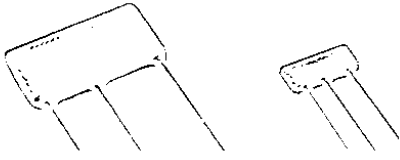
- Excellent Where Temperature Coefficient Is Not Important, Such As By-pass and Coupling Applications
- Ideal For Replacing Older Types Of General Application Capacitors Such as Molded Micacs, Tubular Ceramics, and Paper Tubulars

MMF	Cat. No.	List	MMF	Cat. No.	List	MMF	Cat. No.	List	MMF	Cat. No.	List	MMF	Cat. No.	List
300 WVDC (plates)			47	5GA-Q47	\$.25	1000 WVDC (plates)			3.3	15GAB-V33	\$.30			
Std. Tolerance $\pm 20\%$			50	5GA-Q5	.25	Std. Tolerances:			4.7	15GAB-V47	.30			
470	3GAB-T47	\$.35	56	5GA-Q56	.25	Type 10GAB-V47 $\pm .5$ MMF,			6	15GAB-V6	.30			
1000	3GAB-D1	.35	68	5GA-Q68	.25	other types 10GAB $\pm 20\%$,			7.5	15GAB-V75	.30			
2200	3GAB-D22	.45	75	5GA-Q75	.25	types 10HKB MRC			10	15GAB-Q1	.30			
4700	3GAB-D47	.45	82	5GA-Q82	.25				12	15GAB-Q12	.30			
.01 MF	3GAB-S1	.65	91	5GA-Q91	.25	1000 WVDC (discs)			15	15GAB-Q15	.30			
.022	3GAB-S22	.65	100	5GA-T1	.25	Std. Tolerances:			18	10GAB-Q18	.30			
.047	3GAB-S47	.70	120	5GA-T12	.25	thru 680 MMF $\pm 10\%$,			22	10GAB-Q22	.30			
.1	3GAB-P1	.75	130	5GA-T13	.25	thru 3300 MMF $\pm 20\%$,			25	10GAB-Q25	.30			
.15	3GAB-P15	.80	150	5GA-T15	.25	thru 10,000 MMF MRC			33	10GAB-Q33	.30			
400 WVDC (discs)			180	5GA-T18	.25	4.7 10GA-V47 \$\$.30			39	10GAB-Q39	.30			
Std. Tolerance $\pm 20\%$			200	5GA-T2	.25				47	10GAB-Q47	.30			
10	4GA-Q1	\$.25	220	5GA-T22	.25				68	10GAB-Q68	.30			
15	4GA-Q15	.25	240	5GA-T24	.25				75	10GAB-Q75	.30			
22	4GA-Q22	.25	250	5GA-T25	.25				82	10GAB-Q82	.30			
33	4GA-Q33	.25	270	5GA-T27	.25				100	10GAB-T1	.30			
47	4GA-Q47	.25	300	5GA-T3	.25				120	10GAB-T12	.30			
68	4GA-Q68	.25	330	5GA-T33	.25				150	10GAB-T15	.30			
100	4GA-T1	.25	350	5GA-T35	.25				180	10GAB-T18	.30			
150	4GA-T15	.25	360	5GA-T36	.25				180	10GAB-T18	.30			
220	4GA-T22	.25	390	5GA-T39	.25				200	10GAB-T2	.30			
330	4GA-T33	.25	400	5GA-T4	.25				220	10GAB-T22	.30			
470	4GA-T47	.25	470	5GA-T47	.25				250	10GAB-T25	.30			
500 WVDC (discs)			500	5GA-T5	.25				270	10GAB-T27	.30			
Std. Tolerance $\pm 20\%$			560	5GA-T56	.25				300	10GAB-T3	.30			
5	5GA-V5	\$.25	600	5GA-T6	.25				330	10GAB-T33	.30			
6	5GA-V6	.25	680	5GA-T68	.25				390	10GAB-T39	.30			
7.5	5GA-V75	.25	750	5GA-T75	.25				470	10GAB-T47	.30			
8	5GA-V8	.25	800	5GA-T8	.25				500	10GAB-T5	.30			
10	5GA-Q1	.25	820	5GA-T82	.25				560	10GAB-T56	.50			
12	5GA-Q12	.25	1000	5GA-D1	.25				680	*10HKB-T68	.50			
15	5GA-Q15	.25	1200	5GA-D12	.25				1000	*10HKB-D1	.50			
18	5GA-Q18	.25	1300	5GA-D13	.25				1200	*10HKB-D12	.50			
20	5GA-Q2	.25	1500	5GA-D15	.25				1500	*10HKB-D15	.50			
22	5GA-Q22	.25	1600	5GA-D16	.25				2200	*10HKB-D22	.50			
25	5GA-Q25	.25	1800	5GA-D18	.25				3300	*10HKB-D33	.50			
27	5GA-Q27	.25	2000	5GA-D2	.25				4700	*10HKB-D47	.50			
30	5GA-Q3	.25	2200	5GA-D22	.25				.01 MF	*10HKB-S1	.60			
33	5GA-Q33	.25	2500	5GA-D25	.25				.015	*10HKB-S15	1.10			
39	5GA-Q39	.25	2700	5GA-D27	.25				.022	*10HKB-S22	1.35			
			3000	5GA-D3	.25				1500 WVDC (plates)					
			3300	5GA-D33	.25				Std. Tolerances:					
			3900	5GA-D39	.25				thru 4.7 MMF $\pm .5$ MMF,					
									all others $\pm 20\%$					

Sprague Bulplate Printed Circuits date 1956

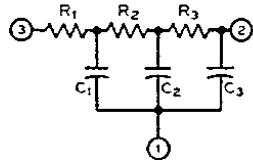
2 The "circle-deuce" logo is an industrial code for Sprague

www.33audio.com



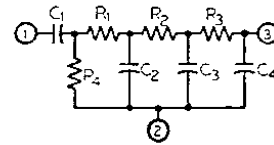
- Especially Designed to Save Space and Reduce Assembly Time
- Completed Unit is Protected by a Moisture-proof Coating
- A Combination of Resistors and Capacitors of Maximum Compactness
- Capacitors are rated at 500 volts d-c, 1000 volts test, while the maximum voltage to be applied across the resistors is 250 volts d-c; except on 100C1 where all elements are rated at 100 volts d-c.
- Integral Connections are "Printed" and Brought Out to External Leads Which Are Anchored to the Basic Ceramic Plate

VERTICAL INTEGRATOR



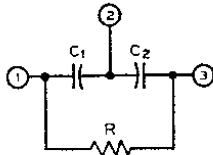
C ₁ (MF)	C ₂ , C ₃ (MF)	R ₁ (KΩ)	R ₂ , R ₃ (KΩ)	Old Cat. No.	Cat. No.	List Price
.0022	.0047	22	8.2	101C1	V-1	\$1.10

VERTICAL INTEGRATOR



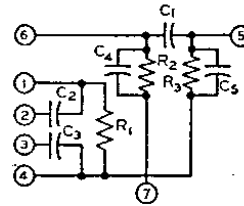
C ₁ (MF)	C ₂ (MF)	C ₃ , C ₄ (MF)	R ₁ , R ₂ (KΩ)	R ₃ , R ₄ (KΩ)	Cat. No.	List Price
.01	.002	.005	22	8.2	V-2	\$1.25

DIODE FILTER



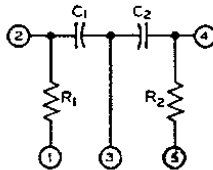
C ₁ (MMF)	C ₂ (MMF)	R (KΩ)	Old Cat. No.	Cat. No.	List Price
100	100	47	100C1	D-1	\$.60
150	150	47	—	D-2	.60
50	50	47	—	D-3	.60

AUDIO OUTPUT



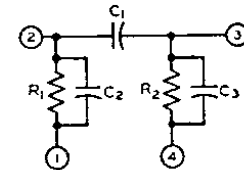
C ₁ (MF)	C ₂ (MF)	C ₃ (MMF)	C ₄ +C ₅ (MMF)	R ₁ (MΩ)	R ₂ , R ₃ (MΩ)	Old Cat. No.	Cat. No.	List Price
.0047	.0022	220	220	6.8	.47	103C4	DT-1	\$1.00
.005	.005	220	220	6.8	.47	—	DT-2	1.15

DECOUPLING FILTER



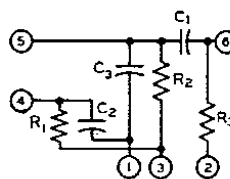
C ₁ (MF)	C ₂ (MF)	R ₁ (Ω)	R ₂ (Ω)	Cat. No.	List Price
.0047	.0047	1000	820	F-1	\$.85
.0047	.0047	220	1000	F-2	.85

TRIODE COUPLING



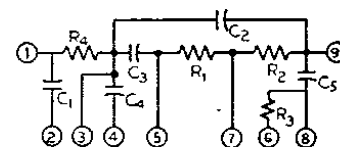
C ₁ (MF)	C ₂ +C ₃ (MMF)	R ₁ (MΩ)	R ₂ (MΩ)	Old Cat. No.	Cat. No.	List Price
.01	250	.5	.5	102C1	T-1	\$.75
.01	250	.25	.5	103C2	T-2	.75
.005	250	.5	.5	104C4	T-3	.70
.005	250	.25	.5	—	T-4	.70

PENTODE COUPLING



C ₁ (MF)	C ₂ (MF)	C ₃ (MMF)	R ₁ (MΩ)	R ₂ (MΩ)	R ₃ (Ω)	Old Cat. No.	Cat. No.	List Price
.0047	.0022	47	4.7	1.0	2.2	—	P-1	\$.90
.0047	.0047	100	4.7	1.0	2.2	103C3	P-2	.90
.002	.005	100	4.7	1.0	2.2	—	P-3	1.00

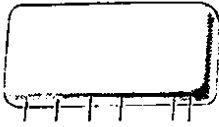
DETECTOR PENTODE COUPLING



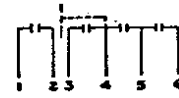
C ₁ (MF)	C ₂ , C ₄ (MMF)	C ₃ (MF)	C ₅ (MF)	R ₁ (MΩ)	R ₂ (MΩ)	R ₃ (MΩ)	R ₄ (MΩ)	Cat. No.	List Price
.002	150	.01	.005	4.7	1.0	3.3	10	DP-1	\$1.25

Sprague date 1956 Radio Electronic Master

Bulplate Multiple Ceramics



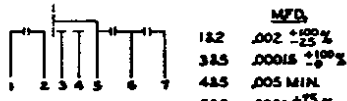
- These Rugged Units Combine in One Compact Assembly All the Capacitors Used in One or More Stages of a Radio Circuit
- Fit Tight Spaces in Miniature Sets
- Rated at 500 WVDC, 1000 VDC Test



	MFD.
1&2	.002 ±10%
3&4	.00022 ±50%
4&5	.00022 ±50%
5&6	.005 ±10%

Cat. No. 34C3

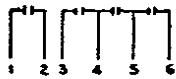
List, \$75



	MFD.
1&2	.002 ±10%
3&5	.00018 ±100%
4&5	.005 MIN.
5&6	.0001 ±75%
6&7	.005 ±10%

Cat. No. 34C4

List, \$90

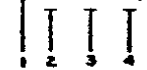


	MFD.
1&2	.002 ±10%
3&4	.005 MIN.
4&5	.0001 ±75%
5&6	.005 ±10%

Cat. No. 34C5

List, \$75

3x.004 MFD. MIN.



	MFD.
3 x	.004

Cat. No. 34C6

List, \$65

BUTTON CERAMICS

MMF	Class	List
TYPE 501C		
100	GA ± 20%	\$.70
470	GA ± 20%	.70
1000	MRC	.70
1500	MRC	.70
TYPE 502C		
10	SL	.65
22	SL	.65
TYPE 503C		
100	GA ± 20%	.75
470	GA ± 20%	.75
1000	MRC	.75
1500	MRC	.75
TYPE 505C		
100	GA ± 20%	.70
220	GA ± 20%	.70

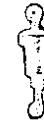
MMF	Class	List
470	MRC	\$.70
1000	MRC	.70
TYPE 506C		
470	GA ± 20%	.75
1000	MRC	.75
1500	MRC	.75
TYPE 507C		
100	GA ± 20%	.90
220	GA ± 20%	.90
470	MRC	.90
680	MRC	.90
1000	MRC	.90
TYPE 508C		
470	GA ± 20%	.95
1000	MRC	.95
1500	MRC	.95



501C



502C



503C



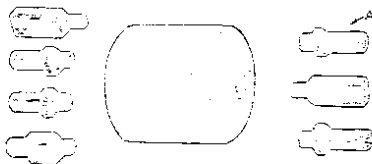
505C, 506C



507C, 508C

- Designed for u-h-f TV Receivers and Electronic Equipment
- Flat Disc Design Means Low Self-inductance and High Self-resonant Frequency—Superior to Similar Units using Tubular Ceramic Elements
- Capacitor Element Sealed in Top of Unit with Plastic Resin
- 502C "shirt studs" are for u-h-f Coupling Applications in TV Sets
- 503C are Feed-thru Capacitors Intended for Filtering Leads thru Chassis—Ferrule Shank fits Standard Push Clip
- Stand-off Capacitors for By-pass Applications: 501C has Ferrule Shank to fit Standard push clip, 505C has Self-tapping 6-32 Thread, 507C has Standard 6-32 Thread, 506C has Self-tapping 10-32 Thread, 508C has Standard 10-32 Thread—All Screw-mounting Types Have Hexagon Heads
- Order by Type, Capacitance, Voltage, Class—Units Listed here are Rated at 500 WVDC

HI-VOLTAGE DOORKNOB CERAMICS



- Capacitor Body has Female Threads for Interchangeable Screw-in Terminals.
- Molded in Non-Flammable, Moisture-resistant, Thermosetting Plastic.
- Molded Guard Rings Lengthen Surface Creepage Path.
- 20DK-T5 Comes Complete with 7 Terminals, as illustrated. (Packaged 2 per plastic box, with 14 terminals.)
- 30DK-T5 is Supplied with 2 Terminals, as per Style Marked "A".

MMF	KV	Dia. x Length	Cat. No.	List
500	20	1 x 3 1/2	20DK-T5	\$1.85
500	30	1 1/4 x 1 1/4	30DK-T5	3.00

CUP CERAMICS

These precision capacitors are widely used in high stability r-f oscillators where frequency control is important. Tolerance on capacitance can be held to ± 1%, and on temperature coefficient to ± 10 ppm. Hermetically sealed construction and low self inductance are noteworthy as are high Q, capacitance stability, and retrace characteristics.



Available in 500, 1000, 1500 volt ratings for all standard temperature coefficients from P100 to N750. Write on company letterhead for complete details.

PRECISION TUBULARS

For exacting circuitry in electronic instrumentation and high stability oscillators. The same stacked disc construction as metal cup ceramics but with higher capacitance range.



Hermetically sealed in plated metal tubes for moisture protection. Rated for -55° C to +85° C operation as are cup ceramics.

Available in ± 1% capacitance tolerances! Available in 500, 1000, 1500 volt ratings for all standard temperature coefficients from P100 to N750. Write on company letterhead for complete details.

CERAMIC TRIMMERS

Widely used in precision circuitry where maximum stability is required. Unlike ordinary low cost trimmers, the special construction of these top-quality units prevents corrosion, permits mounting against chassis, and guarantees long, trouble-free life.



Write on letterhead for complete details.

MMF(Min.)	MMF(Max.)	Cat. No.	List
4	18	A08-006	\$10.00
5	30	A08-007	10.00
8	75	A08-001	10.00
10	110	A08-002	10.00