

**Sarkes
Tarzian**

"Centre-Kooled" POWER RECTIFIERS

SINGLE PHASE—FULL WAVE RECTIFIER STACKS

DC OUTPUT At 35°C. Amb.		CIRCUIT	Max. AC Input	APPROXIMATE DIMENSIONS—Refer to			Figure	Catalog	CIRCUITS AND DIMENSIONAL DIAGRAMS
Volts	Max. Amps.	Refer to Diagram	Volts	A	B	C		No.	
6-10	2	C.T.	13	3"	2 1/4"	3"	2	D-10	
6-10	4	C.T.	13	4"	2 1/4"	4"	2	D-11	
6-10	6	C.T.	13	4"	2 1/2"	4"	2	D-12	
6-10	8	C.T.	13	5"	2 1/4"	6"	2	D-13	
6-10	12	C.T.	13	5"	2 1/2"	6"	2	D-14	
6-10	15	C.T.	13	4 1/4"	2 1/4"	12"	3	D-15	
6-10	22.5	C.T.	13	4 1/4"	2 1/2"	12"	3	D-16	
6-20	2	BR.	26	3"	3"	3"	2	D-17	
6-20	4	BR.	26	4"	3"	4"	2	D-18	
6-20	6	BR.	26	4"	3 3/4"	4"	2	D-19	
6-20	8	BR.	26	5"	3"	6"	2	D-20	
6-20	12	BR.	26	5"	3 3/4"	6"	2	D-21	
6-20	15	BR.	26	4 1/4"	3"	12"	3	D-22	
6-20	22.5	BR.	26	4 1/4"	3 3/4"	12"	3	D-23	
20-40	2	BR.	52	3"	4 1/2"	3"	2	D-24	
20-40	4	BR.	52	4"	4 1/2"	4"	2	D-25	
20-40	6	BR.	52	4"	6"	4"	2	D-26	
20-40	8	BR.	52	5"	4 1/2"	6"	2	D-27	
20-40	12	BR.	52	5"	6"	6"	2	D-28	
20-40	15	BR.	52	4 1/4"	4 1/2"	12"	3	D-29	
20-40	22.5	BR.	52	4 1/4"	6"	12"	3	D-30	
40-60	2	BR.	78	3"	5 3/4"	3"	2	D-31	
40-60	4	BR.	78	4"	5 3/4"	4"	2	D-32	
40-60	6	BR.	78	4"	8 1/4"	4"	2	D-33	
40-60	8	BR.	78	5"	5 3/4"	6"	2	D-34	
40-60	12	BR.	78	5"	8 1/4"	6"	2	D-35	
40-60	15	BR.	78	4 1/4"	5 3/4"	12"	3	D-36	
40-60	22.5	BR.	78	4 1/4"	8 1/4"	12"	3	D-37	
60-100	.5	BR.	130	1.6"	5"	1.6"	1	D-38	
60-100	1	BR.	130	2"	5"	2"	1	D-39	
60-100	2	BR.	130	3"	8 5/8"	3"	2	D-40	
60-100	4	BR.	130	4"	8 5/8"	4"	2	D-41	
60-100	6	BR.	130	4"	12 7/8"	4"	2	D-42	
60-100	8	BR.	130	5"	8 5/8"	6"	2	D-43	
60-100	12	BR.	130	5"	12 7/8"	6"	2	D-44	
100-120	.5	BR.	156	1.6"	5 7/8"	1.6"	1	D-45	
100-120	1	BR.	156	2"	5 7/8"	2"	1	D-46	
100-120	2	BR.	156	3"	10"	3"	2	D-47	
100-120	4	BR.	156	4"	10"	4"	2	D-48	
100-120	6	BR.	156	4"	15 1/4"	4"	2	D-49	
100-120	8	BR.	156	5"	10"	6"	2	D-50	
100-120	12	BR.	156	5"	15 1/4"	6"	2	D-51	

SARKES TARZIAN, INC., RECTIFIER DIVISION

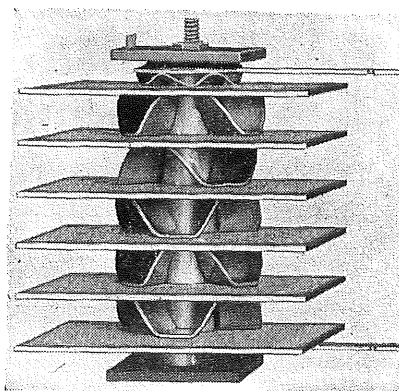
Dept. RM



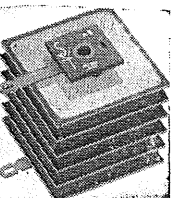
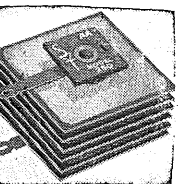
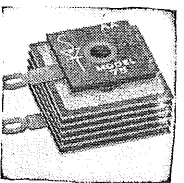
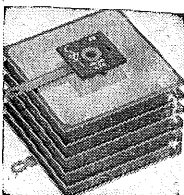
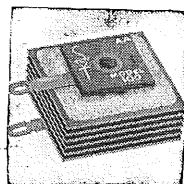
"Centre-Kooled"

SELENIUM RECTIFIERS

For All DC Power Requirements



(Radio Type)



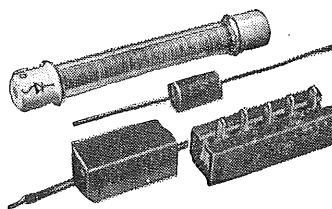
Model No.	Max. DC Current	Max. RMS Input Voltage	Max. RMS Current (MA)	Max. Inverse Peak Voltage	Max. Peak Current (MA)	Dimensions	Application
35	35	130	90	380	350	3/8"x5/8"x5/8"x5/8"	Boosters
65	65	130	162	380	650	13/32"x1"x1"x11/16"	B+ Supply—Portable & AC-DC Radio
75	75	130	187	380	750	13/32"x1"x1"x13/16"	B+ Supply—Portable Radio
100	100	130	250	380	1000	13/32"x1"x1"x13/16"	B+ Supply—AM-FM Radio
100A	100	130	250	380	1000	1 1/4"x1 1/4"x13/16"	B+ Radio
150	150	130	375	380	1500	13/32"x1"x1"x1"	B+ Supply—Radio-Television
200	200	130	500	380	2000	1 1/4"x1 1/4"x13/16"	B+ Supply—Television
250	250	130	625	380	2500	13/32"x1.6"x1.6"x1"	B+ Supply—Television
300	300	130	750	380	3000	1.6"x1.6"x15/16"	B+ Supply—Television
350	350	130	875	380	3500	13/32"x1.6"x1.6"x1 7/8"	B+ Supply—Television
450	450	130	1125	380	4500	13/32"x2"x2"x15/16"	B+ Supply—Television
108	100	160	250	440	1000	13/32"x2"x2"x1 7/8"	B+ Supply—Radio-Television
78D	75	160	187	440	750	13/32"x1 1/4"x31/32"	B+ Supply—1/2 Wave, Mobile Radio-TV
108D	100	160	250	440	1000	13/32"x1"x1"x1 5/8"	B+ Supply—Doubler
208D	200	160	500	440	2000	13/32"x1 1/4"x1 5/8"	—Radio-Television
154B	150	25	270	35	1800	1 1/4"x1.6"x1.6"x1 5/8"	B+—Doubler
304B	300	25	540	35	2400	13/32"x1"x1"x11/16"	—Radio-Television
604B	600	25	1080	35	4000	13/32"x1 1/4"x11/16"	Filament—Relay Supply
						1.6"x1.6"x11/16"	Filament—Relay Supply

HIGH VOLTAGE SELENIUM RECTIFIERS

Sarkes Tarzian high voltage selenium rectifiers are designed for use in photo-flash supplies, cathode ray oscilloscopes, television receivers, high potential test equipment, and electronic equipments used by military forces.

Designated as Type 0 for current ranges to 5 milliamperes and as Type 1 for current ranges to 25 milliamperes, the units are available in half wave, full wave bridge, and center tap stacks. Both types are available with voltage ratings to 4000 in a single unit and hundreds of thousands of volts by using multiple units in series. In center tap and bridge circuits the maximum allowable D.C. current is 10 MA for Type 0 and 50 MA for Type 1 assemblies.

The Type 0, in a glass enclosure is hermetically sealed for high humidity operation (Half Wave units only) and mounting is by means of silver plated ferrules. The bakelite enclosed Type 0 rectifiers are designed for normal commercial use and electrical connection is made by means of axial pigtail leads. For inverse voltage ratings to 208 volts A.C. the unit is self supporting; longer assemblies require a mounting clip.



The Type 1 rectifier is available only in square bakelite enclosures. The unit, normally supplied, is not hermetically sealed; however, it is possible to "capsulize" the Type 1 rectifier for high humidity applications.

For complete information or engineering assistance—write, phone or wire. No obligations on your part.

New Handbook Available 80 pages of valuable information about Selenium Rectifiers . . . 48 pages of Radio & Television circuit diagrams . . . 20 pages on Power Rectifiers . . . 3 pages of High Voltage Rectifiers . . . a 7 page cross index replacement guide. (Price 50 cents)

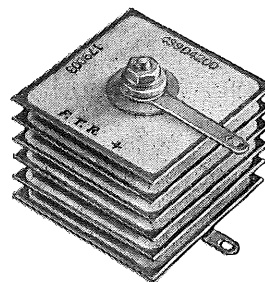
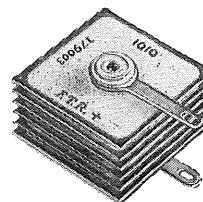
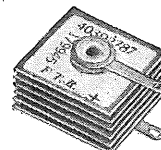
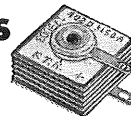
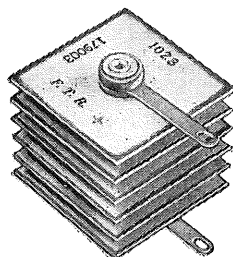
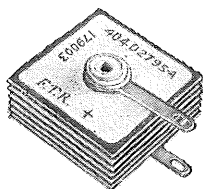
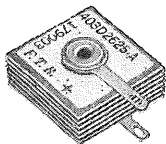


SARKES TARZIAN, INC., RECTIFIER DIV.

Dept. RM

Federal Miniature Selenium Rectifiers

The revolutionary rectifier with unlimited use in radio • television • electronics



Federal Code Number	Output MA DC	Input (RMS)		In-verse Peak		Plate Size	Application	Sugg'd Retail Price Each
		Volts	MA	Volts	MA			
1159	20	130	50	380	200	3/8" dia.	B+Booster Bias	\$1.10
1002A	65	130	160	380	750	1" sq.	B+AC-DC 5 Tube	1.33
1003A	75	130	220	380	900	1" sq.	B+3 Way Radio	1.55
1101A	100	130	160	380	750	1" sq.	B+Radio Telev.	1.90
1004A	100	130	325	380	1200	1 1/2" x 1 1/2"	B+Radio Telev.	1.90
1005A	150	130	425	380	1200	1 1/2" x 1 1/2"	B+ Radio Telev.	2.25
1006A	200	130	550	380	2000	1 1/2" sq.	B+Telev.	2.70
†1010	250	130	625	380	2000	1 1/2" sq.	B+Telev.	3.00
*1028A	250	130	625	380	2000	1 1/2" sq.	B+Booster Bias	3.00
1087A	275	130	700	380	2000	1 1/2" sq.	B+Telev.	2.85
1090A	300	130	750	380	2000	1 1/2" sq.	B+Telev.	3.05
1023	350	130	900	380	3000	1 3/4" sq.	B+Telev.	3.45
1130	400	130	1000	380	4000	2" sq.	B+Telev.	4.25
1021	450	130	1150	380	4000	2" sq.	B+Telev.	4.30
1179	500	130	1150	380	4000	2" sq.	B+Telev.	4.47
1014A	100	160	325	440	1200	1 1/2" x 1 1/2"	Vibrator	3.05
1029A	200	160	550	440	2000	1 1/2" max.	B+Telev.	3.35
1022	450	160	1150	440	4000	2" sq.	B+Telev.	4.25
1007A	75	160	220	440	900	1" sq.	Doubler Vibrator	3.50
1008A	100	160	325	440	1200	1 1/2" x 1 1/2"	Vibrator Doubler	4.40
1009A	200	160	550	440	2000	1 1/2" sq.	Vibrator Doubler	6.00
1015	150	25	270	35	1800	1" sq.	Bridge Rectifier	1.75
1016	300	25	540	35	2400	1 1/2" x 1 1/2"	Bridge Rectifier	2.05
1017	600	25	1080	35	4000	1 1/2" sq.	Bridge Rectifier	2.60
1013	700	• 18	•	•	•	1 1/2" sq.	Battery Charger	1.00
1018	2000	§ 18	•	•	•	4 1/2" lg.	Battery Charger	3.66
1001	75	20	220	55	900	1" sq. (Mtg. Plt.)	Bias Rectifier	.83

1019 N.T.C. Resistor (Resistance: Cold, 1400 ohms, Hot, 200 ohms). .31

• The characteristics given are based on its use in a half-wave rectifier circuit with a .3 cell battery load.

§ The characteristics given are based on its use in a full-wave rectifier circuit with a .3 cell battery load.

† Rating per section—2 sections per rectifier.

‡ Stud construction.

* Eyelet construction.

Letter "A" following catalog number indicates locking lug.

Federal Selenium Rectifier

Replacement KITS are a Hit with Servicemen!

Each Kit contains 2 of each of 4 "Preferred Types" for MOST Radio-TV Replacements

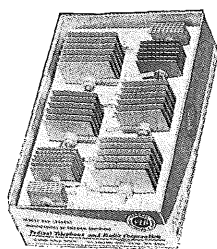
Federal's 8-unit Kits are the convenient, time-saving way for servicemen to make radio-TV replacements "on the spot."

Kit No. 1 contains types for handling 90% of television replacement jobs.

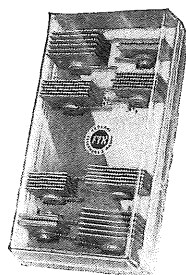
Kit No. 2 contains types for most radio replacements.

Federal Kits are valuable aids in servicing more than 30,000,000 selenium rectifiers now in the field.

Consult your local Federal Distributor or write to Federal direct.



KIT No. 1



KIT No. 2
(Clear Plastic Utility Package)

Federal's Popular Selenium Rectifier Publications



Federal's Miniature Selenium Rectifier Handbook—48 pages of valuable design and application data on America's most complete line of miniature selenium rectifiers.

Price Each.....25¢

Federal Selenium Rectifier Replacement Guide—the most complete book of its kind. Simplifies and speeds replacement of selenium rectifiers in radio-TV receivers. A "must" for servicemen.

Price Each.....50¢



Federal Telephone and Radio Corporation



America's Oldest and Largest Manufacturer of Selenium Rectifiers

PACKAGED POWER SELENIUM RECTIFIER STACKS

by Federal

Federal has America's largest stock of stacks for all popular applications . . . available for prompt shipment. Special design data and prices for the asking.

NOTE: Ratings for 35° C. Ambient; Resistive or Inductive loads;
all designs shown are for single phase full wave rectification.

PRICE LIST and DATA SHEET

Effective September 15, 1951

Maximum D.C. Output (Approximate)†		Rectifier Stack Code Number	Maximum A.C. Input Volts	Circuit and Stack Conn. Diagram	Rectifier Stack Dimensions			Catalog Number	Net User's Price
Volts	Amps.				A	B ± 1/16"	Fig.		
10	3.0	106C1AX1	13	'B'	3 3/8"	1 9/16"	1	2100	\$ 6.67
	6.0	133C1AX1	13		4 7/8"	1 3/4"	1	2101	8.33
	12.0	136C1AX1	13		5" x 6"	1 3/4"	2	2102	11.91
20	3.0	106B1AX1	26	'A'	3 3/8"	2 1/16"	1	2103	9.42
	6.0	133B1AX1	26		4 7/8"	2 11/16"	1	2104	12.58
	12.0	136B1AX1	26		5" x 6"	2 3/4"	2	2105	20.50
40	3.0	106B2AX1	52	'A'	3 3/8"	3 9/16"	3	2026	15.00
	6.0	133B2AX1	52		4 7/8"	5"	3	2107	21.17
	12.0	136B2AX1	52		5" x 6"	5 1/4"	4	2108	34.00
60	3.0	106B3AX1	78	'A'	3 3/8"	4 1/2"	3	2118	20.00
	6.0	133B3AX1	78		4 7/8"	6 3/4"	3	2033	29.17
	12.0	136B3AX1	78		5" x 6"	7 5/16"	4	2085	46.92
80	3.0	106B4AX1	104	'A'	3 3/8"	5 1/2"	3	2109	24.92
	6.0	133B4AX1	104		4 7/8"	8 9/16"	3	2110	37.17
	12.0	136B4AX1	104		5" x 6"	9 5/16"	4	2111	59.84
100	1.0	139B5AX1	130	'A'	2" sq.	5 3/8"	5	2112	16.25
	2.4	106B5AX1	130		3 3/8"	6 5/8"	3	2113	29.83
	6.0	133B5AX1	130		4 3/8"	10 9/16"	3	2114	45.17
120	0.3	103B6AX1	156	'A'	1 9/32" x 1 13/64"	4 3/4"	5*	2115	14.17
	0.6	104B6AX1	156		1 17/32" sq.	4 7/8"	5	2036	16.34
	1.0	139B6AX1	156		2" sq.	6 1/16"	5	2116	18.75
	2.4	106B6AX1	156		3 3/8"	7 5/8"	3	2038	34.92
	6.0	133B6AX1	156		4 3/8"	12 5/16"	3	2117	53.17

† Resistive or Inductive Loads.

* 8-32 Thread



Consult your local Federal Distributor
or write to Federal direct—

Federal Telephone & Radio Corporation

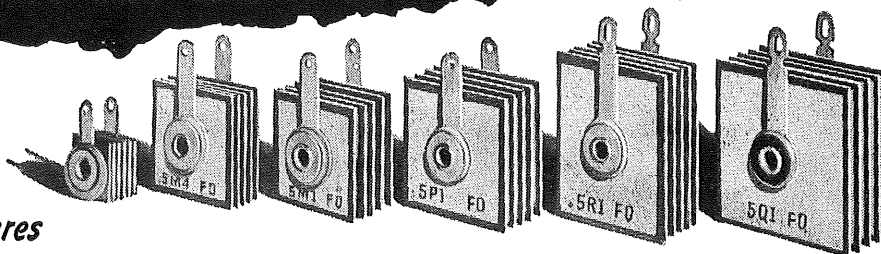
100 KINGSLAND ROAD

SELENIUM-INTELIN DIVISION

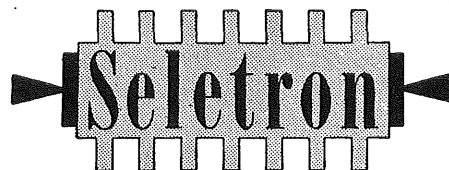
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MILLIONS OF MINIATURES IN SERVICE IN RADIO AND TELEVISION!



Miniatures



SELETRON RECTIFIERS

MINIATURE SELETRON SELENIUM RECTIFIERS

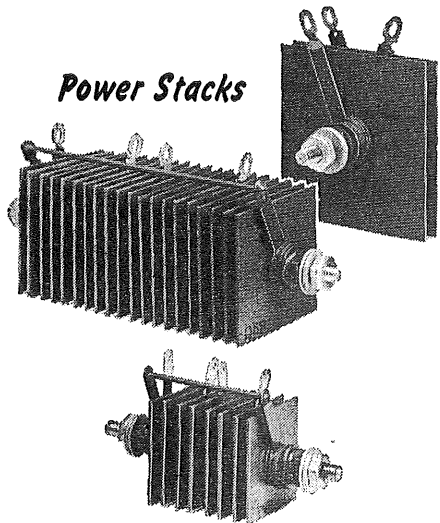
MODEL NO.	PLATE SIZE	STACK THICKNESS	MAX. INPUT VOLTAGE R.M.S.	MAX. PEAK INVERSE VOLTAGE	MAX. D.C. OUTPUT CURRENT	LIST PRICE
1M1	1" sq.	3/8"	25	75	100 MA	\$0.83
8Y1	1/2" sq.	9/16"	130	380	20 MA*	1.15
16Y1	1/2" sq.	15/16"	260	760	20 MA*	2.28
8J1	11/16" sq.	9/16"	130	380	65 MA	1.38
5M4	1" sq.	11/16"	130	380	75 MA	1.65
5M1	1" sq.	7/8"	130	380	100 MA	2.00
5P1	1 3/16" sq.	7/8"	130	380	150 MA	2.45
6P2	1 3/16" sq.	1 3/16"	156	456	150 MA	2.60
5R1	1 1/2" x 1 1/4"	7/8"	130	380	200 MA	2.85
5Q1	1 1/2" sq.	1 1/8"	130	380	250 MA	3.22
6Q1	1 1/2" sq.	1 1/8"	156	456	250 MA	3.28
6Q2	1 1/2" sq.	1 3/8"	156	456	250 MA	3.28
6Q4(+)	1 1/2" sq.	1 1/2"	130	380	300 MA	3.55
5QS1	1 1/2" x 2"	1 1/8"	130	380	350 MA	3.80
6QS2	1 1/2" x 2"	1 1/4"	156	456	350 MA	4.05
5S1	2" sq.	1 1/8"	130	380	500 MA	4.35
6S2	2" sq.	1 3/8"	156	456	500 MA	5.20

* This rectifier is rated at 25 MA when used with a 47 ohm series resistor.

(+) Stud mounted—overall: 2".

SELETRON Selenium Rectifiers are finding use in wider and wider fields of application ranging from half wave stacks for bias supply such as 8Y1 listed at the left, to multiple assemblies capable of delivering many kilowatts. Typical examples of such SELETRON power use are installations operating elevators in more than 100 office buildings in New York and Chicago; an assembly of 48 volts, 10,000 amps for electrolysis of water, and the spectacular Eveready searchlight on New York's Great White Way.

Power Stacks



INDUSTRIAL TYPE SELENIUM RECTIFIERS STOCKED BY JOBBERS

Single Phase — Full Wave Bridge — Resistive-Inductive Load

D.C. OUTPUT @ 35°C			MAX. INPUT R.M.S. VOLTS	SELETRON RECTIFIER CODE NO.	RECTIFIER LIST PRICE	BRACKETS LIST EACH
MAX. AMPS.	APPROX. VOLTS NEW	APPROX. VOLTS AGED				
0.9	18	17	24	Q1B1S1B	\$2.40	.17
1.4	19	18	24	S1B1S1B	4.16	.22
3.2	18	17	24	U1B1S1B	6.34	.22
5.2	18	17	24	F1B1S1B	8.82	.28
10.0	18	17	24	H1B1S1B	12.38	.44
20.0	18	17	24	H1B2S1B	23.43	.44
30.0	19	18	24	WH1B3S1B	35.26	.44
0.45	37	35	48	P2B1S1B	5.00	.17
0.9	37	35	48	Q2B1S1B	5.64	.17
1.4	37	35	48	S2B1S1B	7.60	.22
3.2	37	35	48	U2B1S1B	11.25	.22
5.2	37	34	48	F2B1S1B	16.08	.28
10.0	37	34	48	H2B1S1B	22.71	.44
16.0	37	35	48	H2B2S1B	42.73	.44
24.0	37	35	48	H2B3S1B	61.95	.44
0.9	112	105	144	WQ6B1S1B	14.65	.17
1.4	114	108	144	WS6B1S1B	21.32	.22
2.4	112	106	144	U6B1S1B	27.53	.22
5.2	110	103	144	WF6B1S1B	44.46	.28
0.9	130	122	168	WQ7B1S1B	16.57	.17
1.4	133	126	168	WS7B1S1B	24.56	.22
2.4	131	123	168	U7B1S1B	31.29	.22
5.2	129	120	168	WF7B1S1B	50.97	.28

Our Engineering Department will be glad to aid you in the solution of your rectifier problems without obligation. Write for booklet on SELETRON Selenium Rectifiers — Address Dept. US-5.

SELETRON DIVISION RADIO RECEPTOR COMPANY, INC.

Since 1922 in Radio and Electronics

Sales Department: 251 West 19th St., New York 11, N. Y.

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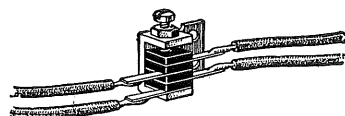
● ELECTROX[®]

Low-Capacity RECTIFIER UNITS

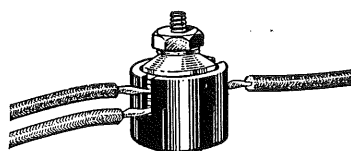
Used by most leading test set manufacturers as original components in their equipment.

*Trade Mark Reg. U. S. Pat. Off.

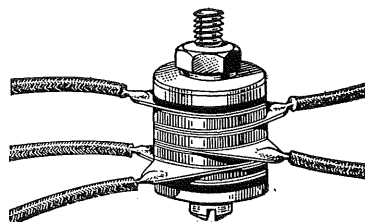
Full and half wave, low-capacity copper oxide rectifiers for instruments, test sets and similar applications. ElectroX Rectifiers are made by a pioneer manufacturer of high-quality, dry disc rectifiers. Each type is specially adapted to meet the individual requirements of the user; each unit is individually inspected, tested, and guaranteed right. For dependability, get genuine ElectroX Rectifiers!



TYPE A-4
CAT. NO. 5020



TYPE B-2
CAT. NO. 5047
CAT. NO. 5049



TYPE C-4
CAT. NO. 5017

Max. Continuous Rating			Circuit Diagram Fig.	Element Diam. Inches	No. of Elements	Connections	Lead Length Inches	Type	Cat. No.
D.C. M.A.	D.C. Volts	A.C. Rms. Volts							
1	1	1.5	3	$\frac{1}{8}$	4	4 leads	4	AA-4	5064
5	3	4	3	$\frac{3}{16}$ †	4	4 leads	3	A-4	5020
13		3	1	$\frac{1}{16}$	1	2 leads	3	B-1	5048
13		4	4	$\frac{1}{16}$	2	3 leads	3	B-2	5047
13		3*	2	$\frac{1}{16}$	2	3 leads	3	B-2	5049
20	3	4	3	$\frac{1}{16}$	4	5 leads	3	B-4	5016
32		3	1	$\frac{3}{4}$	1	2 lugs		C-1	5011
32		3*	2	$\frac{3}{4}$	2	3 leads		C-2	5057
32		3*	5	$\frac{3}{4}$	2	4 lugs		C-2	5010
64	3	4.1	3	$\frac{3}{4}$	4	5 lugs		C-4	5014
64	3	4.1	3	$\frac{3}{4}$	4	5 leads	3	C-4	5017

*3 volts A.C. per element.

† $\frac{3}{16}$ " square.

CIRCUIT DIAGRAMS

FIG. 1 HALF WAVE



FIG. 2 DOUBLER



FIG. 3 FULL WAVE BRIDGE



FIG. 4 FULL WAVE CENTER TAP



FIG. 5 TWO SEPARATE HALF WAVE RECTIFIERS



SCHAUER MANUFACTURING CORP. • Cincinnati, Ohio
Makers, since 1930, of high-quality, dry disc rectifiers.

BRADLEY RECTIFIERS AND PHOTOCELLS

**VACUUM PROCESSED FOR
PERFORMANCE AS RATED**

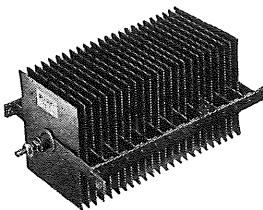
SELENIUM



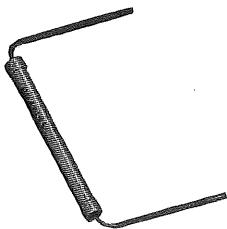
HIGH-VOLTAGE RECTIFIERS
(SE6M Series). Ratings to 5 ma D.C.—
6000 volts maximum peak inverse.
Hermetically sealed in glass tubes.
Ferrules for fuse type mounting.

POWER RECTIFIERS

(SE11 Series). Ratings
from 50 ma to thou-
sands of amperes.
Available in half-wave,
full-wave bridge, volt-
age multiplier, center tap full-wave, polyphase, and
special connections to customer's current and volt-
age requirements. Plate size from 1"x1" to 5"x6".



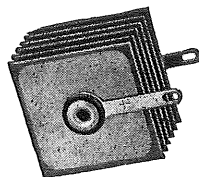
LIMITER (SR Series). For magnetic
amplifier and special applica-
tions. Hermetically sealed to
meet all specifications.



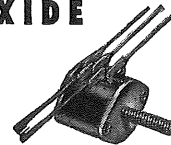
**MINIATURE HIGH-
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(SE8 Series). Completely
sealed in Bakelite housings.
Ratings up to 6000 volts
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D.C. Size from 1/4" diam-
eter x 5/8" long.

HALF-WAVE RECTIFIERS

(SE9 Series). Rated from 50
ma to 500 ma. Peak inverse
up to 500 volts. Plate size
from 1"x1". Length 1/2" to 1 1/2".



COPPER OXIDE



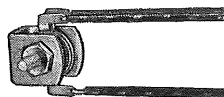
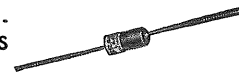
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RATIO RECTIFIERS**
(CX4D Series), for electronic
control and instrument
work. Ratings from 25 ma to 100 ma and up to
12 volts A.C. Completely enclosed housing. Size
7/8"x3/4", from 1/2" to 2" long. Single 6-32
screw mounting.



**MINIATURE HERMETICALLY SEALED
RECTIFIERS (CX23 Series).** Modula-
tors and bridges with matched sec-
tions for detecting phase differen-
tials in A.C. currents and small
D.C. potentials applied to balanced
A.C. circuits. Maximum 2 volts
continuous as modulators, 6 volts
as bridges.

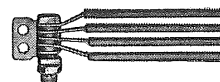
LOW-CURRENT HIGH- FREQUENCY RECTIFIERS

(CX8C Series).
Rated up to 36 volts A.C. 500 microamperes D.C.
Size 1/4" diameter x 3/8" long. 2 1/2" tinned leads.



**CONTROL AND TEST
EQUIPMENT RECTIFIERS**
(C014D Series). Rated from
20 ma half-wave to 35 ma
full-wave, up to 6 volts
A.C., 4 volts D.C. Single 6-32 screw mounting.

INSTRUMENT RECTIFIERS
(CX2E Series). Rated up to
6 volts A.C., 4.5 volts D.C.,
5 ma D.C. for conventional
circuits and special cur-
rent control applications.
Two 7/64" diameter
mounting holes. 3" gold
leads.



**BALANCED BRIDGES
AND MODULATORS**
(CX3E Series) with current
and temperature character-
istics balanced to better
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-40°C. to 70°C. Up to
12 volts A.C., 8 volts D.C.,
5 ma D.C. Hermetically
sealed.



NEW HANDBOOK AVAILABLE

Valuable reference for engineers.
Contains design considerations as
well as complete descriptions of
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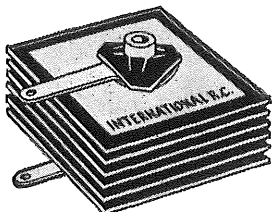
BRADLEY LABORATORIES, INC.

168 COLUMBUS AVENUE, NEW HAVEN 11, CONNECTICUT

International *Selenium Rectifiers*

MINIATURE RECTIFIERS

As easily
installed as a
Resistor or
Condenser.



Only 2
Soldering
Operations
required.

130 Volts
RMS

Peak Inverse
Volts: 380

FOR ELECTRONIC APPLICATIONS UP TO
1,000 MA

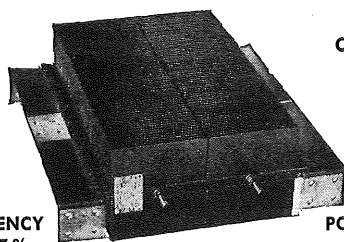
Approximate Voltage Drop: 5 volts

RATINGS AVAILABLE

Type No.	RS75	RS100	RS150	RS200	RS250	RS1000
Current (ma)	75	100	150	200	250	1000

SEND FOR BULLETIN IS-1249

POWER RECTIFIERS



Suitable for
Oil Immersion

EFFICIENCY
TO 87 %

POWER FACTOR
95 %

RATINGS TO 250 KW

FOR ELECTROPLATING, BATTERY CHARGING,
ELEVATOR AND AIRCRAFT POWER SUPPLY UNITS, ETC.

PARTIAL LIST OF POWER RECTIFIERS

TYPE NO.	DC VOLTS	DC AMPS	SIZE PLATE
D507	0-15	0.5	1 1/4" Sq.
D510	0-15	3.0	3" Sq.
D513	0-15	14.0	6 1/4" x 7 1/4"
D517	15-30	3.0	3" Sq.
D520	15-30	14.0	6 1/4" x 7 1/4"
D521	95	5.0	4 3/8" Sq.

WRITE FOR BULLETIN C-349

HIGH VOLTAGE RECTIFIERS

CARTRIDGE TYPE

RATINGS TO 25 KV AND 75 MA.

In half-wave, voltage doubler or bridge circuits
From 1/4" to 1 1/4" O.D. or built to your specifications

TYPICAL APPLICATIONS

BIAS SUPPLIES
CONDENSER TESTING
CATHODE RAY TUBES
ELECTRON MULTIPLIERS
ELECTROSTATIC PROCESSES
GEIGER COUNTERS
INVERSE PEAK SUPPRESSORS
PHOTOFLASH POWER SUPPLIES
TELEVISION CIRCUITS

TYPE V-HF SERIES
1/2 WAVE — 5 MA. DC



TYPE V-HF SERIES

DC OUTPUT VOLTAGE	RECTIFIER PART NO.	DC OUTPUT VOLTAGE	RECTIFIER PART NO.
20	V1HF	1000	V50HF
60	V3HF	2000	V100HF
100	V5HF	3000	V150HF
400	V20HF	4000	V200HF

TYPE Y-HP SERIES
1/2 wave—11 MA. DC



DC OUTPUT VOLTAGE	RECTIFIER PART NO.	DC OUTPUT VOLTAGE	RECTIFIER PART NO.
20	Y1HP	1000	Y50HP
60	Y3HP	2000	Y100HP
100	Y5HP	3000	Y150HP
400	Y20HP	4000	Y200HP

TYPE U-HF SERIES
1/2 wave—1.5 MA. DC

1/4" Diameter
Rating to
4,000 v. DC



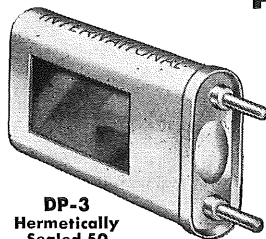
Fit standard
automotive
type Fuse clips

PARTIAL LIST OF U-HF SERIES AVAILABLE

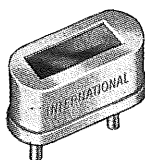
DC OUTPUT VOLTAGE	RECTIFIER PART NO.	STD. AUTO-TYPE FUSE CLIP	MAX. LENGTH INCHES
200	U10HF	7-AG	27/32
360	U18HF	7-AG	27/32
500	U25HF	8-AG	31/32
600	U30HF	3-AG	1-7/32
700	U35HF	9-AG	1-3/8

WRITE FOR BULLETIN H-1

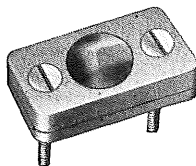
PHOTO-ELECTRIC CELLS SELF-GENERATING TYPE



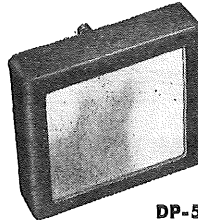
DP-3
Hermetically
Sealed 50
microamperes
at 100
foot-candles



DP-2
Hermetically
Sealed 25
microamperes
at 100
foot-candles

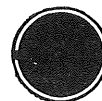


A-2M
13 micro-
amperes at
100 foot-
candles



DP-5
Hermetically Sealed
Up to 600 microamperes
at 100 foot-candles

Unmounted Cells
Available



Write for
Bulletins
PC-649,
PPC-250,
HPC-450,
HPC-252

International

RECTIFIER CORPORATION

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El Segundo, Calif.
Phone El Segundo 1890

CHICAGO BRANCH OFFICE:

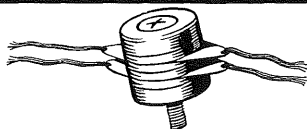
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Franklin 2-3889

CONANT

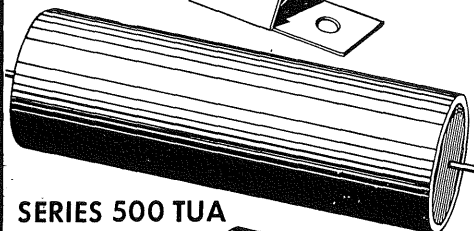
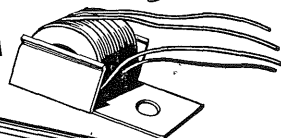
Miniature Metallic Rectifiers

STANDARD SINCE 1933

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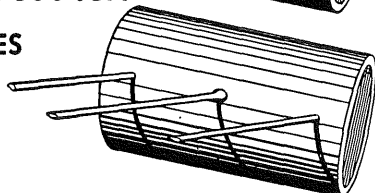


SERIES 500 ERM

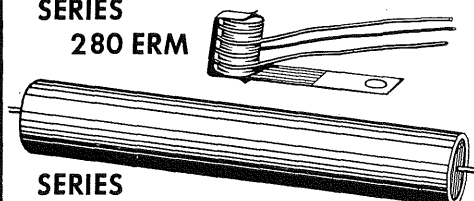


SERIES 500 TUA

SERIES 500 TUR

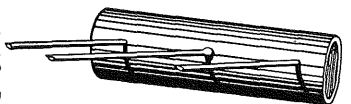


SERIES 280 ERM

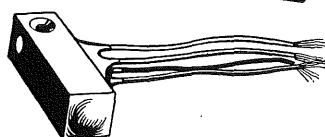


SERIES 280 TUA

SERIES 280 TUR



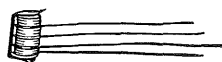
SERIES 160



SERIES 160C



SERIES 160 ERM



ALL RECTIFIERS SHOWN ACTUAL SIZE

INTERNAL CIRCUITS

Standard rectifiers are connected internally according to one of the five circuit diagrams shown.

SERIES 500 Copper oxide only. Color coded. Welded lead wires 3" long. Synthetic lacquer-enamel finish. Single 6-32 stud mounting. Available in special types. Cell diameter .500". Cell rating 5 r.m.s. volts, 30 average mils.

SERIES 500-ERM Copper oxide or selenium. Color coded. Solid lead wires 3" long. Lacquer finish. Single hole mounting. Available in special types. Cell diameter .500". Cell ratings, copper oxide 5 r.m.s. volts, 30 average mils; selenium, 25 r.m.s. volts, 30 average mils.

SERIES 500-TUA Selenium only. Color coded. Solid axial leads 3" long. Lacquer finish. Mounts by lead wires only. Fully enclosed and sealed in phenolic tube. Half wave types only for high voltage. Cell diameter .500". Cell rating 25 r.m.s. volts, 30 average mils. Per cell ratings subject to derating according to rectifier design.

SERIES 500-TUR Selenium only. Color coded. Solid radial leads 3" long. Lacquer finish. Mounts by lead wires only. Fully enclosed and sealed in phenolic tube. Cell diameter .500". Cell rating 25 r.m.s. volts, 30 average mils. Per cell ratings subject to derating according to rectifier design.

SERIES 280-ERM Copper oxide or selenium. Color coded. Solid lead wires 3" long. Lacquer finish. Mounts by "Bracketterminal" combining cathode (plus) terminal and mounting bracket. Available in standard types only. Cell diameter .280". Cell rating, copper oxide, 5 r.m.s. volts, 10 average mils; selenium, 25 r.m.s. volts, 10 average mils.

SERIES 280-TUA Selenium only. Color coded. Solid axial leads 3" long. Lacquer finish. Mounts by lead wires only. Fully enclosed and sealed in phenolic tube. Half wave types only, for high voltage. Cell diameter .280". Cell rating 25 r.m.s. volts, 10 average mils. Per cell rating subject to derating according to rectifier design.

SERIES 280-TUR Selenium only. Color coded. Solid radial leads 3" long. Lacquer finish. Mounts by lead wires only. Fully enclosed and sealed in phenolic tube. Cell diameter .280". Cell rating 25 r.m.s. volts, 10 average mils. Per cell rating subject to derating according to rectifier design.

SERIES 160 Copper oxide or selenium. Color coded. Welded lead wires 3" long. Fully enclosed and sealed in molded phenolic case. Mounts by #2 screw. Cell diameter .160". Cell rating, copper oxide, 5 r.m.s. volts, 5 average mils; selenium, 25 r.m.s. volts, 5 average mils.

SERIES 160-C Copper oxide or selenium. Color coded. Welded lead wires 3" long. Fully enclosed and sealed in welded brass case. Mounts in midge fuse clip. Cell diameter .160". Cell rating, copper oxide, 5 r.m.s. volts, 5 average mils; selenium, 25 r.m.s. volts, 5 average mils.

SERIES 160-ERM Copper oxide or selenium. Color coded. Solid leads 1" long. Lacquer finish. Mounts by lead wires only. Cell diameter .160". Cell rating, copper oxide, 5 r.m.s. volts, 5 average mils; selenium, 25 r.m.s. volts, 5 average mils.

Standard rectifiers are connected internally according to one of the five circuit diagrams shown.

Series 500, 160 and 160-C are the well known standard line of instrument rectifiers and are constructed to the highest standards of quality. Construction is conventional.

TUA (tubular, axial leads) and TUR (tubular, radial leads) construction is desirable especially in rectifiers designed for high voltage operation. Total enclosure of the stack however limits heat radiation necessitating derating of cells.

ERM (external resilient member) construction insures maintenance of optimum stack pressures regardless of ambient or operating temperatures. Rectifiers in ERM construction are smaller, lighter and cheaper.



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