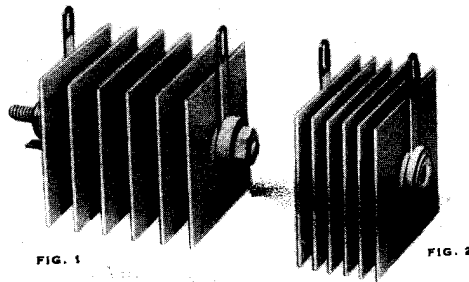


"TOMORROW'S RECEPTION TODAY"

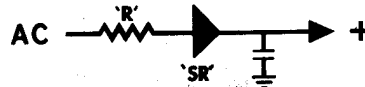
# Federal's MINIATURE SELENIUM RECTIFIERS

The revolutionary rectifier with unlimited use in radio, television and electronics

Boosts Performance to New High  
 No Rectifier Filament Supply Necessary  
 Runs Cool—Won't Overheat Set  
 Delivers Greater Output Voltage  
 Increases Sensitivity of Set



Steps-up Undistorted Audio Output  
 Easily and Quickly Installed in Set  
 Metal Throughout—Can't Break  
 Will Outlast the Life of a Tube  
 Takes Heavy Overloads



Federal Cat. No. 'SR'	Output MA-DC	Max. Input (RMS)		Min. Ser. Res. 'R'	Peak Inverse Volts (Max.)	Peak Current (Max.)	Plate Size	Fig.	Application
		Volts	MA	Ohms					
1159	20	130	54	50	380	200	3/8" Dia.	...	B+ Booster; Bias
1214A	50	130	135	35	380	500	11/16" Sq.	2	B+ Radio
1002A	65	130	175	22	380	650	1" Sq.	2	B+ AC-DC (5 tube)
1003	75	130	200	22	380	750	1" Sq.	2	B+ 3-way Radios
1101A	100	130	270	22	380	1000	1" Sq.	2	B+ Radios, Television
1004A	100	130	270	22	380	1000	1 1/4" Sq.	2	B+ Radios, Television
1005A	150	130	410	15	380	1500	1 1/4" Sq.	2	B+ Radios, Television
1006A	200	130	540	5	380	2000	1 17/32" Sq.	2	B+ Television
1010	250	130	675	5	380	2500	1 17/32" Sq.	1	B+ Television
1028A	250	130	675	5	380	2500	1 17/32" Sq.	2	B+ Booster; Bias
1087A	275	130	740	5	380	2750	1 17/32" Sq.	2	B+ Television
1090A	300	130	810	5	380	3000	1 17/32" Sq.	1	B+ Television
1023	350	130	945	5	380	3500	1 3/4" Sq.	1	B+ Television
1130	400	130	1080	5	380	4000	2" Sq.	1	B+ Television
1021	450	130	1200	5	380	4500	2" Sq.	1	B+ Television
1179	500	130	1350	5	380	5000	2" Sq.	1	B+ Television
1014A	100	160	270	22	460	1000	1 1/4" Sq.	2	Vibrator
1029A	200	160	540	5	460	2000	1 17/32" Sq.	2	B+ Television
1022	450	160	1200	5	460	4500	2" Sq.	1	B+ Television
1007A	75	160*	200	22	460	750	1" Sq.	1	Vibrator Doubler
1008A	100	160*	270	22	460	1000	1 1/4" Sq.	1	Vibrator Doubler
1009A	200	160*	540	5	460	2000	1 17/32" Sq.	1	Vibrator Doubler
1015	150	25	175	...	35	750	1" Sq.	2	Bridge Rectifier
1016	300	25	350	...	35	1500	1 1/4" Sq.	2	Bridge Rectifier
1017	600	25	700	...	35	3000	1 17/32" Sq.	2	Bridge Rectifier
1013	360	9‡	...	...	...	...	1 17/32" Sq.	2	Battery Charger
1018	1600	26‡	...	...	...	...	4 1/4" lg. (Mtg. Plt.)	...	Battery Charger
1001	75	20	200	...	35	750	1" Sq.	2	Bias Rectifier
1019	N.T.C. Resistor (Resistance: Cold, 1400 ohms, Hot, 200 ohms)								

\* The values shown are for one section of a two-section rectifier. For a series connection of the two sections, double the values for input volts and inverse volts.

† The input voltage shown is the maximum which may be applied in a half-wave rectifier circuit for battery charging.

‡ The input voltage shown is the maximum which may be applied to the outside terminals in a center-tap rectifier circuit.

## Federal Telephone and Radio Company

In Canada:—Federal Electric Manufacturing Company, Ltd., Montreal, P. Q.  
 Export Distributors International Standard Electric Corporation, 67 Broad St., New York



SELENIUM-INTELIN DEPARTMENT  
 100 Kingsland Road  
 CLIFTON, NEW JERSEY

# RADIO RECEPTOR SELENIUM RECTIFIERS

## CROSS REFERENCE OF RADIO AND TV TYPES

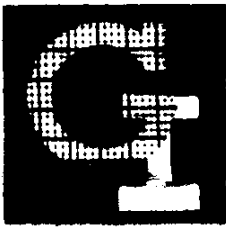
RR Co. HIGH DENSITY TYPES	RR Co. CONVENTIONAL TYPES	FEDERAL	INTERNATIONAL	SARKES
—	8Y1	1159	—	10
—	8J1	1002A, 1263A, 1386	T065, RS065, RS050	50, 65
RR150	5M4	1003A	T075, RS075	75
RR150	5M1	1004A, 1101A, 1101A-H	T100, RS100	100, 100A
RR150	5P4	1005A	T150, RS150	150
—	6P2	—	6RS150	—
RR300	5R1	1006A	RS200	200
RR300	5Q1	1010, 1028	T250, RS250	250A, 250
—	6Q1	—	6RS250	—
RR300	6QA1	1236A-H, 1236A, 1090A	T300, MR300, RS300SL	300A, 300X, 300
RR400	6QA2	1206, 1023A, 1238A	T350, RS350, RS350SL	350A, 350X
—	6QS2	—	6RS350SL	—
RR400	6S4	1056, 1130, 1241A, 1241A-H	T400, RS400, RS400SL	400A, 400X, 400
RR500	6S2	1237A-H, 1179, 1021, 1237A	RS450SL, MR500, T500, RS500SL	500A, 500X, 500
—	6S2	—	6RS500SL	—
RR650	—	1207A-H	T650	600
RR659	—	1319A	—	509, 609
—	10J5	—	—	58
—	8M1	—	—	78
—	8P1	1014	—	108
—	8Q1	—	—	208
—	8S1	1022	—	—
—	20J2	—	—	38D
—	16M0836	1007	—	78D
—	16P0657	1008	—	108D
—	16Q0656	1009	—	208D
—	4J7	—	Q1B	—
—	20J4	—	Q4B	—
—	M1B1E1G	1015	A1B	154B
—	P1B1E1G	1016	B1B	304B
—	Q1B1E1G	1017	C1B	604B
—	S1B1E1G	—	M1B	—
—	1Q0639	1013	—	—
—	4Q079B	1018	—	—
—	1J1	—	Q1H	—
—	1M1	1001	A1H	—
—	1P1	—	B1H	—
—	1Q1	—	C1H	—
—	1S1	—	M1H	—

**NOTE:** These Radio Receptor types are electrical substitutes for those of other manufactures listed on the same line. It should not be inferred that they are physically identical or that other manufactures' types listed on the same line are necessarily interchangeable.

**RADIO RECEPTOR COMPANY, INC.**

Subsidiary of General Instrument Corporation

240 Wythe Avenue, Brooklyn 11, N. Y. • EVERgreen 8-6000



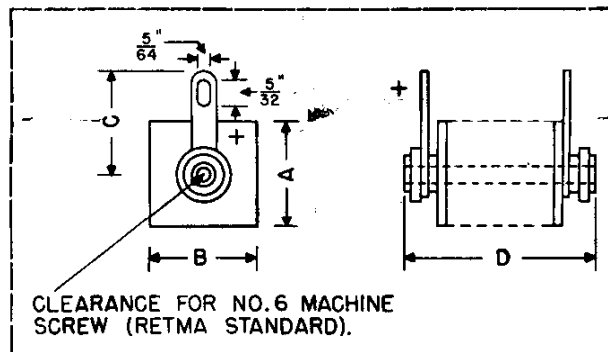
# RADIO RECEPTOR SELENIUM RECTIFIERS

## RADIO AND TV TYPES

### RATINGS AND DIMENSIONS

MAX. D.C. OUTPUT MA.	CATALOG NO.	MAX. A.C. INPUT VOLTS	MIN. SERIES RESISTOR (OHMS)	MAX. PEAK INVERSE VOLTAGE	A (INCHES)	B (INCHES)	C +0 -1/2 (INCHES)	D ±1/4 (INCHES)
<b>HIGH DENSITY REPLACEMENT LINE</b>								
150	RR150	130	15	380	1	1	1 1/8	1 1/4
300	RR300	130	5	380	1.3	1.3	1 1/8	1 1/4
400	RR400	130	5	380	1.6	1.6	1 1/8	1 1/4
500	RR500	130	5	380	1.6	1.6	1 1/8	1 1/4
650	RR650	130	5	380	2	2	1 1/8	1 1/4
650	RR659*	195	5	560	2	2	1 1/8	2
<b>STANDARD REPLACEMENT LINE</b>								
65	8J1	130	33	380	1/8	1/8	1/2	1/2
75	5M4	130	22	380	1	1	1 1/8	1 1/4
100	5M1	130	22	380	1	1	1 1/8	1 1/4
150	5P1	130	15	380	1 1/8	1 1/8	1 1/8	1 1/4
200	5R1	130	5	380	1 1/8	1 1/8	1 1/8	1 1/4
250	5Q1	130	5	380	1 1/2	1 1/2	1 1/8	1 1/4
300	6QA1	130	5	380	1 1/2	1 1/2	1 1/8	1 1/4
350	6QA2*	130	5	380	1 1/2	1 1/2	1 1/8	1 1/4
400	6S4	156	5	456	2	2	1 1/8	1 1/4
500	6S2	156	5	456	2	2	1 1/8	1 1/4
<b>SPECIAL REPLACEMENT LINE</b>								
100	1M1	25	None	75	1	1	1 1/8	1 1/4
30	8Y1	130	47	380	1/2	1/2	1 1/8	1 1/4
25	16Y1	260	47	760	1/2	1/2	1 1/8	1 1/4
75	6M1	156	22	456	1	1	1 1/8	1 1/4
100	6M2	156	22	456	1	1	1 1/8	1 1/4
150	6P2	156	15	456	1 1/8	1 1/8	1 1/8	1 1/4
250	6Q1	156	5	456	1 1/2	1 1/2	1 1/8	1 1/4
300	6Q4*	130	5	380	1 1/2	1 1/2	1 1/8	1 1/4
350	5QS1	130	5	380	1 1/2	2	1 1/8	1 1/4
350	6QS2	156	5	456	1 1/2	2	1 1/8	1 1/4
350	6SQ1	156	5	456	2	1 1/2	1 1/8	1 1/4
400	5S2	130	5	380	2	2	1 1/8	1 1/4
500	5S3	130	5	380	2	2	1 1/8	1 1/4

\*These units are mounted on a stud eyelet with an 8-32 x 1/4" thread extending from the negative side. All others are mounted on an eyelet with clearance for a #6 machine screw.  
The ratings above are for half-wave capacitive load.



General Instrument  
Distributor Division

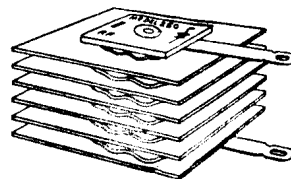


**RADIO RECEPTOR COMPANY, INC.**

Subsidiary of General Instrument Corporation

240 Wythe Avenue, Brooklyn 11, N. Y. • Evergreen 8-6000

Bulletin No. D-103  
(Supersedes No. 251A)  
March, 1958

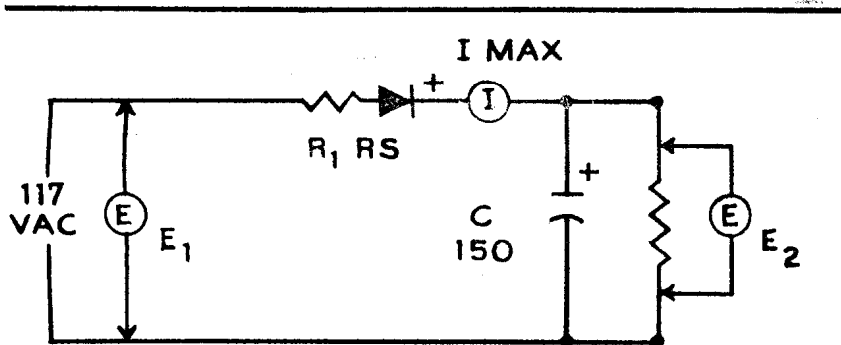


### SELENIUM "Centre-Kooled" RECTIFIER

PATENTS NO. 2618692 & 2620384

PHONES 2-1435-6-7 • 415 NORTH COLLEGE AVENUE • BLOOMINGTON, INDIANA

## SPECIFICATIONS and TYPICAL APPLICATIONS



B+ Power for—

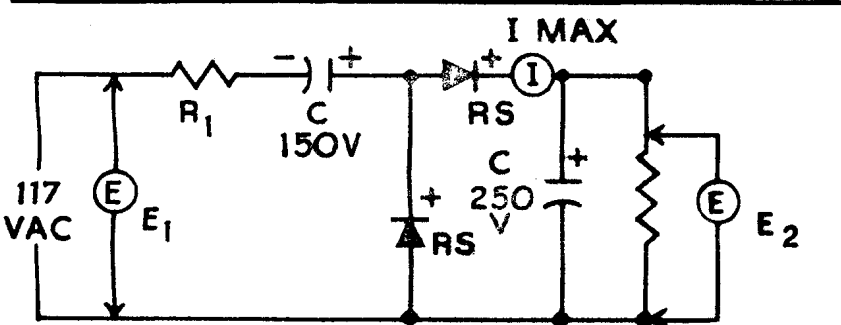
Portable Radio  
AC-DC Radio  
A.M. - F.M. Radio

Television  
Electronic Devices

### HALF WAVE

RS MODEL	E1 AC Volt	E2 DC Volt	I Max. DC MA.	CAP Mfd.	R1 Ohms
65	117	130	65	30	22
75	117	130	75	50	22
100	117	130	100	50	22
150	117	125	150	80	15
200	117	130	200	80	5
250	117	130	250	100	5
300	117	130	300	150	5
350A	117	130	350	200	5
*400	117	130	400	200	5
**500	117	130	500	350	5
600	117	125	600	350	5

\*Formerly Model 350  
\*\*Formerly Model 450



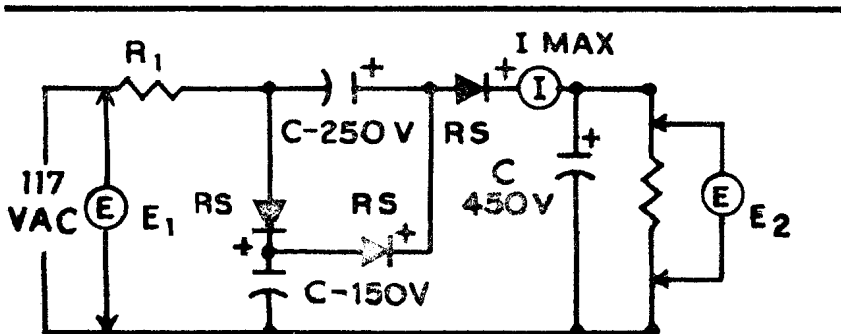
B+ Power for—

Television  
Console Radio  
Electronic Devices

### VOLTAGE DOUBLER

RS MODEL	E1 AC Volt	E2 DC Volt	I Max. DC MA.	CAP Mfd.	R1 Ohms
65	117	250	65	30	22
75	117	255	75	50	22
100	117	245	100	50	22
150	117	245	150	80	15
200	117	255	200	80	5
250	117	245	250	100	5
300	117	250	300	150	5
350A	117	250	350	200	5
*400	117	240	400	350	5
**500	117	240	500	350	5
600	117	240	600	350	5

\*Formerly Model 350  
\*\*Formerly Model 450



B+ Power for—

Television  
Deluxe Radio  
Electronic Devices

### VOLTAGE TRIPLER

RS MODEL	E1 AC Volt	E2 DC Volt	I Max. DC MA.	CAP Mfd.	R1 Ohms
65	117	355	65	30	22
75	117	360	75	50	22
100	117	340	100	50	22
150	117	305	150	80	15
200	117	360	200	80	5
250	117	355	250	100	5
300	117	350	300	150	5
350A	117	350	350	200	5
*400	117	340	400	350	5
**500	117	340	500	350	5
600	117	340	600	350	5

\*Formerly Model 350  
\*\*Formerly Model 450

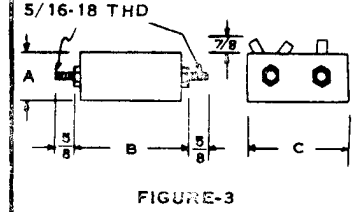
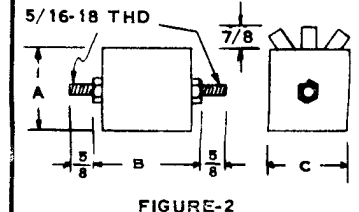
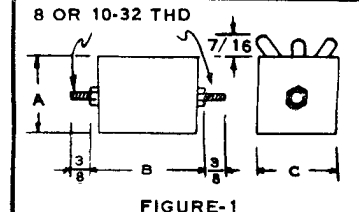
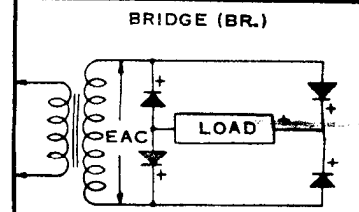
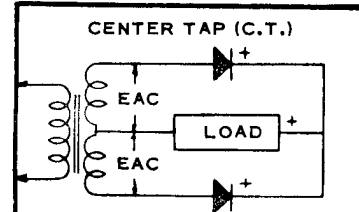


# "Centre-Seal'd"

## POWER RECTIFIERS IN STOCK

PS-2

SINGLE PHASE - FULL WAVE RECTIFIER STACKS									
DC OUTPUT At 45°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"	2½"	3"	2	D-10	
6-10	4	C.T.	13	4"	2½"	4"	2	D-11	
6-10	6	C.T.	13	4"	2½"	4"	2	D-12	
6-10	8	C.T.	13	5"	2½"	6"	2	D-13	
6-10	12	C.T.	13	5"	2½"	6"	2	D-14	
6-10	15	C.T.	13	4¼"	2½"	12"	3	D-15	
6-10	22.5	C.T.	13	4¼"	2½"	12"	3	D-16	
6-20	1.5	BR.	26	2"	1½"	2"	1	D-52	
6-20	2	BR.	26	3"	3½"	3"	2	D-17	
6-20	4	BR.	26	4"	3½"	4"	2	D-18	
6-20	6	BR.	26	4"	4"	4"	2	D-19	
6-20	8	BR.	26	5"	3½"	6"	2	D-20	
6-20	12	BR.	26	5"	4"	6"	2	D-21	
6-20	15	BR.	26	4¼"	3½"	12"	3	D-22	
6-20	22.5	BR.	26	4¼"	4"	12"	3	D-23	
20-40	2	BR.	52	3"	4"	3"	2	D-24	
20-40	4	BR.	52	4"	4"	4"	2	D-25	
20-40	6	BR.	52	4"	6½"	4"	2	D-26	
20-40	8	BR.	52	5"	4"	6"	2	D-27	
20-40	12	BR.	52	5"	6½"	6"	2	D-28	
20-40	15	BR.	52	4¼"	4"	12"	3	D-29	
20-40	22.5	BR.	52	4¼"	6½"	12"	3	D-30	
40-60	2	BR.	78	3"	6"	3"	2	D-31	
40-60	4	BR.	78	4"	6"	4"	2	D-32	
40-60	6	BR.	78	4"	8"	4"	2	D-33	
40-60	8	BR.	78	5"	6"	6"	2	D-34	
40-60	12	BR.	78	5"	8"	6"	2	D-35	
40-60	15	BR.	78	4¼"	6"	12"	3	D-36	
40-60	22.5	BR.	78	4¼"	8"	12"	3	D-37	
60-100	.5	BR.	130	1.6"	5¾"	1.6"	1	D-38	
60-100	1	BR.	130	2"	5¾"	2"	1	D-39	
60-100	2	BR.	130	3"	8½"	3"	2	D-40	
60-100	4	BR.	130	4"	8½"	4"	2	D-41	
60-100	6	BR.	130	4"	13¼"	4"	2	D-42	
60-100	8	BR.	130	5"	8½"	6"	2	D-43	
60-100	12	BR.	130	5"	13¼"	6"	2	D-44	
100-120	.5	BR.	156	1.6"	6"	1.6"	1	D-45	
100-120	1	BR.	156	2"	6"	2"	1	D-46	
100-120	2	BR.	156	3"	10¼"	3"	2	D-47	
100-120	4	BR.	156	4"	10¼"	4"	2	D-48	
100-120	6	BR.	156	4"	15½"	4"	2	D-49	
100-120	8	BR.	156	5"	10¼"	6"	2	D-50	
100-120	12	BR.	156	5"	15½"	6"	2	D-51	



ALL DIMENSIONS  
ARE APPROXIMATE

EACH RECTIFIER IS ATTRACTIVELY AND INDIVIDUALLY BOXED TO INSURE SAFE TRANSIT AND STORAGE. A FREE INSTRUCTION BOOKLET IS ALSO INCLUDED.