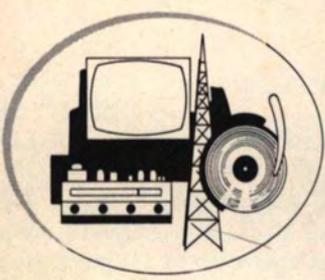


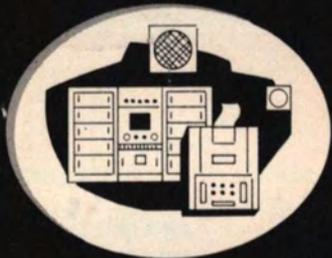
# International



For Radio-TV Service Dealers and Experimenters . . . including radio-TV applications, hi-fi systems, tape recorders and phonographs.



# Rectifier



For Commercial Equipment Repair and Maintenance . . . including computers and data processing, electronic measuring instruments, intercoms and medical electronic equipment.

# Semiconductors

If You Didn't Get This From My Site,  
Then It Was Stolen From...  
[www.SteamPoweredRadio.Com](http://www.SteamPoweredRadio.Com)



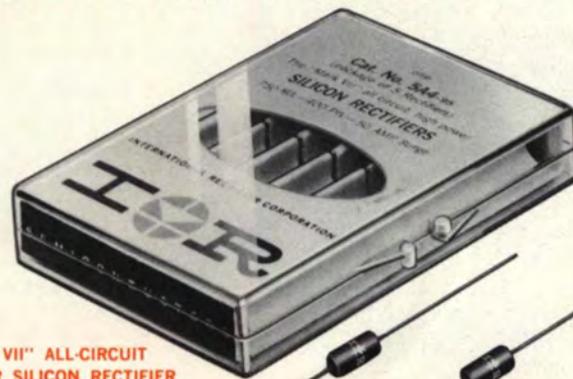
For Industrial Equipment Repair and Maintenance . . . including battery chargers, welders, electro-plating industrial control systems

the most  
extensive line of  
quality rectifiers and diodes  
available to the electronics service industry



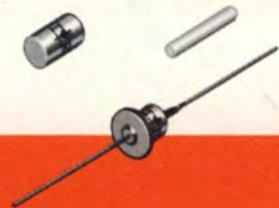
## TV • RADIO • AUDIO • RECTIFIERS AND DIODES

International Rectifier's advanced silicon radio-TV devices make servicing faster, simpler than ever before . . . make calls more profitable, cut inventories and cut shelf, bench and kit space to a minimum. High efficiency and long, reliable operation assure the serviceman a minimum of troublesome "callbacks."



THE "MARK VII" ALL-CIRCUIT HIGH POWER SILICON RECTIFIER

SILICON SD 500 "TOP-HAT" AND KIT



### THE "MARK VII" ALL-CIRCUIT HIGH POWER SILICON RECTIFIER

High Current — to 750 ma  
High Surge to 50 Amps/Higher Reliability

The new Mark VII . . . a combination of high power capability (to 750 ma), peak surge current capacity to 50 amps (about 10 times standard units) and miniaturized, rugged construction that make it the ultimate in radio-TV replacement diodes. It will replace virtually any rectifier, selenium or silicon, in all circuits drawing up to 750 ma dc, including television, radio, hi-fi systems, filament supplies, motor control, voltage multiplying . . . a multitude of circuits where excellent electrical and mechanical stability is called for.

#### RATINGS

Type No.	Peak Reverse Voltage	RMS Input Volts	DC Output Ma @ 25°C		Max. Surge Current, Amps
			Res.	Cap.	
5A4	400	140	850	750	50

#### AVAILABLE IN THESE PACKAGES:

Cat. No.	Packaging	D'Ir Net
5A4	Indiv. Packaged	\$1.35
5A4-BU	Bulk — 10 to pkg.	1.07*
5A4-95**	Plastic box of 5	6.50

\*lots of 10      \*\*order per box

The MARK VII rectifier is also available in the following values for various electronic and electrical applications.

Type No.	Peak Reverse Voltage	RMS Input Volts		DC Output Ma @ 100°		Max. Surge Amps	Net Price (1-9 Pc.)
		Cap.	Res.	Res.	Cap.		
5A2	200	70	140	650	500	50	\$1.10
5A5	500	175	350	650	500	50	1.50
5A6	600	210	420	650	500	50	1.65

### SILICON SD 500 "TOP-HAT" AND KIT . . . QUALITY STANDARD OF THE INDUSTRY! HERMETICALLY SEALED, EASY TO INSTALL: WIRES IN OR CLIPS IN.

Cut your rectifier stock and cut your callbacks with the premium quality SD-500 kit . . . the hermetically sealed replacement rectifier that is specifically designed for speedy installation in radio-TV, hi-fi, intercoms, phonographs, and other audio and control circuits. It WIRES IN . . . to directly replace axial lead units or CLIPS IN . . . a 10-second conversion permits plug-in into existing clip-type sockets (kit contains all needed parts). Where high humidity or other severe environmental conditions are encountered, the hermetically sealed SD-500 provides added protection, and long, dependable operation.

#### RATINGS

Type No.	Peak Reverse Voltage	RMS Input Volts	DC Output Ma @ 50°C		Max. Surge Amps
			Res.	Cap.	
SD-500	400	140	750	650	5

#### AVAILABLE IN THESE PACKAGES

Cat. No.	Packaging	D'Ir Net
SD 500	Indiv. boxes, no hardware	\$1.05
SD 500-BU	Bulk, no hardware, 10 to pkg.	.92
SD 500-92**	Popular Kit of 2 rectifiers incl. conversion hardware and compl. instructions.	2.30
SD 500-95**	Same as above but kit of 5	5.50

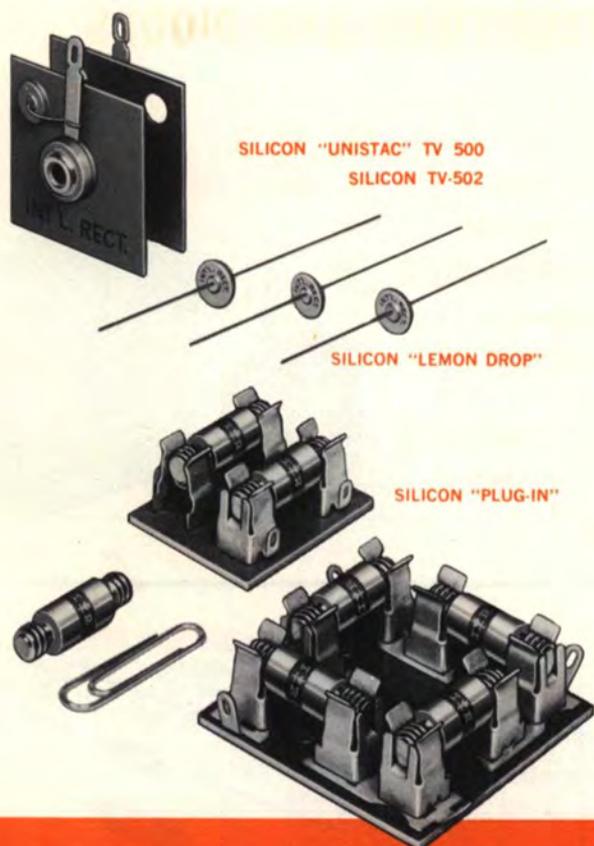
\*in lots of 10      \*\*order per kit

**REPLACE ALL SELENIUM TV RECTIFIERS WITH THE SILICON "UNISTAC" TV 500 AND THE SILICON TV-502 (DOUBLER & COLOR TV TYPE)**

Here are two silicon quality rectifiers designed for direct mechanical replacement of selenium stacks.

The "UNISTAC TV-500" is rated conservatively at 750 MA peak capacitive load and will replace practically any single selenium rectifier in TV sets. The "UNISTAC TV-502" is a dual unit for voltage doubler circuit application and for color TV replacement, and is rated at 750 MA at 800 PRV.

The dependable performance of the "UNISTAC" results from the use of military type hermetically sealed silicon rectifiers, mounted on efficient heat sinks. Small size and eyelet construction make these rectifiers easy to mount and connect.



Cat. No.	Application	D'r Net
TV 500	Universal, 750 mil rectifier	\$1.86
TV 502	Dual rectifier for voltage doubler circuits and color TV e.g. RCA MODELS: 21CT-660U, 661U, 662U, 663U, 664U, CT-100 Chassis CTC4, CTC4A, CTC2 RAYTHEON MODELS: C-21C1-B, -M, M-21C0-B, -M SYLVANIA MODELS: 31C606, 31T304M, Chassis 1-534-1, -2	3.30

**THE "PLUG-IN" ALL-CIRCUIT SILICON RECTIFIER FOR FAST, EASY INSERTION INTO CLIP-TYPE SOCKETS!**

The same superior Mark VII ratings in a modified plug-in package to provide the technician with a fast, simplified means of replacing practically all existing radio-TV rectifier types! May be rapidly snapped into audio-amplifier, radio-TV, motor control, industrial power supply and other circuits utilizing clip-type rectifier holders. In addition, a wide variety of polyphase circuits may be speedily assembled by simply clipping the "plug-in" into clip-type holders.

**RATINGS**

Type No.	Peak Reverse Voltage	RMS Input, Volts	DC Output Ma @ 50°C		Max. Surge Current, Amps
			Res.	Cap.	
1M4	400	140	350	250	2
5M4	400	140	850	750	50

Available individually and in complete kits containing standard clip holders and hardware.

**AVAILABLE IN THESE PACKAGES:**

Cat. No.	Packaging	D'r Net
1M4	Indiv. Boxed	\$ .95
1M4-BU	Bulk-10 to a pkg.	.85*
1M4-K	Kit, includ. rectif. holder, hdwe and resistor	1.00
5M4	Indiv. Boxed	1.60
5M4-95**	Plastic Box of 5	7.50
5M4-BU	Bulk-10 to a pkg.	1.40*
5M4-K	Kit of 2 rect. with holder	3.85

\*In lots of 10 \*\*order per box

43-1803	SNAP-IN Holder only (single)	\$ .12
43-1804	SNAP-IN Holder only (dual)	.25
43-1805	SNAP-IN Holder only (quadruple)	.90

**THE LOW COST SILICON "LEMON DROP" LINE . . . COMBINES ECONOMY WITH DEPENDABILITY IN A SILICON RECTIFIER.**

The 5E4 and 2E4 "Lemon Drops" are recommended for television, radio, tape recorders, phonographs and other audio applications where low rectifier cost, miniaturization and dependable operation are called for in a silicon rectifier. Rated at 450 ma dc output, the 5E4 "Lemon Drop" enables replacement of rectifiers in many TV sets, as well as radios and medium power amplifiers. The 2E4 "Lemon Drop" is rated at 250 ma and will provide high reliability in smaller hi-fi systems, intercoms, tape recorders and similar low current electronic applications.

**RATINGS**

Type No.	Peak Reverse Voltage	RMS Input Volts	DC Output Ma @ 50°C		Max. Surge Amps
			Res.	Cap.	
2E4	400	140	350	250	2
5E4	400	140	650	450	5

**AVAILABLE IN THESE PACKAGES:**

Cat. No.	Packaging	D'r Net
2E4	Indiv. Boxes	\$ .70
2E4-BU	Bulk-10 to a pkg.	.65*
5E4	Indiv. Boxes	.90
5E4-BU	Bulk-10 to a pkg.	.75*
5E4-95**	Plastic Box of 5	3.95

\*In lots of 10 \*\*order per box



## GENERAL PURPOSE RECTIFIERS AND DIODES

### COMPACT SELENIUM STACKS FOR ECONOMY, RELIABILITY

Compact, high density types designed for long life and reliability in radio, TV, record players, amplifiers and experimental applications. Output ratings from 50 ma to 650 ma at 130 volts RMS input. Economy, stable characteristics, and negligible leakage and aging of selenium provides long, economical rectifier operation. Replacement type rectifiers are individually boxed and are furnished with mounting bracket and hardware.



### GERMANIUM DIODES FOR A WIDE RANGE OF LOW CURRENT APPLICATIONS

Miniature germanium diodes with outstanding performance characteristics . . . ideal for such applications as blocking, bias supplies, switching and automatic volume control. Miniature, hermetically sealed construction assures optimum operation over a wide range of humidity, temperature and other environmental extremes.



### SELENIUM DIODES PROVIDE HIGH EFFICIENCY AT LOW COST . . .

Recommended for low current circuits where miniaturization, reliability and low cost are required, including bias supplies, sensitive relays, digital and analog computers, hearing aids, electronic organs, switching, blocking and A.V.C. Small and compact in size, these units are potted in a rugged, thermosetting compound to protect them from corrosive ambients, moisture, salt spray and fungus. They will provide stable operation over a temperature range from  $-50^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$ .

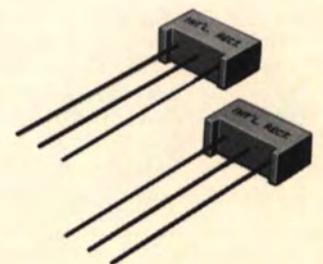


### RUGGED, RELIABLE SELENIUM DUAL DIODES

Quality replacements for TV Phase Detector Circuits. These diodes are of superior quality and packaged for easy identification. Connecting diagram and complete interchangeability table is supplied with each unit.

DD06	Type	Equivalent to			D'Ir Net
		GE	IRC	IT&T	
DD04	Com. Cathode	6GC1	D4	K1615	\$ .84
DD05	Ser. Connect.	6GD1	D5	K1616	.84
DD06	Com. Anode	6GX1	-	K1617	.84

### DUAL DIODES





# ZENER DIODES

## LOW COST "TRI-SEALED" VOLTAGE REGULATORS FOR USE IN EVERY PHASE OF INDUSTRY

Cat. No.	DC Output Current, Ma	Max. RMS Volts	Dimensions, Nom. Plate Size (Inch)	Max. Mounting Dimension (Inch)	D'r Net
T065/075	to 75	130	0.67 x 0.67	7/16	\$.60
T075/150	75-150	130	1 x 1	3/4	.69
T200/300	150-300	130	1.25 x 1.25	1 1/16	1.30
T350/400	300-400	130	1.5 x 1.5	1 5/16	1.45
T450/500	400-500	130	1.5 x 1.5	1 5/16	1.50
T550/650	500-650	130	2 x 2	2	1.74

### ENCAPSULATED TYPES

QM 50	to 50	130	7/8 x 7/8	1/2	.64
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Cat. No.	Min. Fwd. Current (Ma @ IV)	Max. Inverse Current	ma @ V	Max. DC Inverse Volts	D'r Net
1N34A	5.0	0.030 @ -10 V	0.500 @ -50	60	\$.40
1N48	4.0	—	0.833 @ -50	70	.48
1N60	6.0	—	0.800 @ -30	40	.43
1N64	5.0	0.45 @ -3 V	0.200 @ -10	25	.48
1N87G	4.0	0.100 @ -25 V	0.025 @ -15	30	.35
1N294	5.0	0.010 @ -10 V	0.800 @ -50	70	.60
1N295	—	0.200 @ -10 V	—	50	.35
1N541	—	0.018 @ -10 V	0.350 @ -45	45	.45
1N542	—	(Matched Pair of 2 1N541's)	—	—	.90
1N636	2.5	0.010 @ -10 V	—	60	.38

Part No.		RMS Input Volts, AC		DC Output Current, ma	PRV, Volts	D'r Net
Int'l Type	Jedec Type	Res. Load	Cap. Load			
1T1	1N1625A	33	20	0.5	48	\$.37
2T1	1N1626A	66	40	0.5	96	.41
1U1	1N1627	33	20	3.75	48	.37
2U1	1N1628	66	40	3.75	96	.41
3U1	1N1629	99	60	3.75	144	.45
4U1	1N1630	132	80	3.75	192	.48
6U1	1N1632	198	120	3.75	288	.56
1V1	1N1635	33	20	12.5	48	.37
2V1	1N1636	66	40	12.5	96	.41
5V1	1N1639	165	100	12.5	240	.52
3Y1	1N1642	99	60	28	144	.45

### REPLACEMENT TABLE \*

Manufacturer	DD04	DD05	Manufacturer	DD04	DD05
Admiral	93B5-6	93B5-4, 3, 5	Philco	34-8037, 2-3	
Emerson	817074	817062 817962	RCA *	109328	
General Electric	K115J510-1, 2 K117J460-1, 2 WT16X7		Silvertone	D51	B46-110 D76 48-110 86-3-1
Hallcrafters	27C226 027-300226		Sylvania	13-85943-1, 2 624-0006 624-0007	
Hoffman	10031 744002 744006		Trav-Ler	SR13	SR-10 SR-15 SR-15
Magnavox		530045-1, 2, 3	Westinghouse	66X21	
Motorola *	48C751656 48K741255	48B742698 48K742698 48K754153 65K744238	Zenith	296V004H01 103-20	633977

\* Type DD06 will replace Motorola Type 48K751724 and RCA Types 6GX1, 107268.



ZENER DIODE HANDBOOK  
... 100 circuit-filled pages on zener diode applications. Ask your distributor today for your copy. Price: \$2.00

### 1 WATT AND 10 WATT RATED TYPES (10% TOLERANCE)

Zener diodes are finding their way into almost every electronic application, as voltage regulators, reference elements, meter protectors, limiters, indicators, temperature sensors and control elements on such widely diverse applications as instrumentation, missiles, computers, radio-TV transmitters and receivers, telephone, alarm and radar systems, electrical machinery, brake controls, typesetters, paper cutters, battery chargers, welders and electroplating. Small wonder that International Rectifier "Tri-Sealed" zeners, with their low cost, low dynamic impedance and sharp zener "knees" are in such demand. The 1 watt and 10 watt rated types listed below are sealed with a 3-barrier layer to provide positive protection against environmental extremes, while assuring low diode cost.

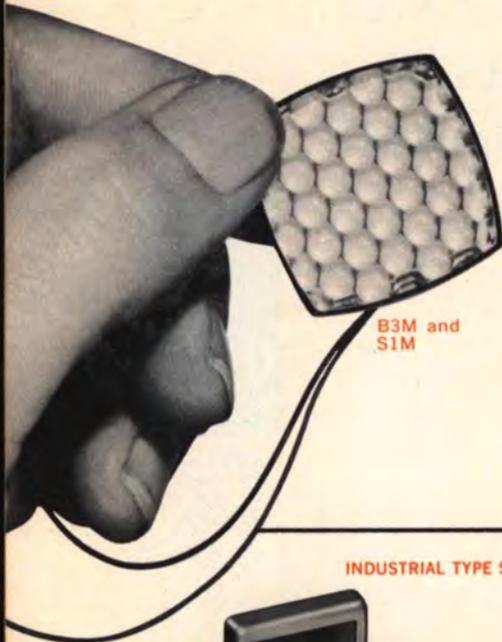
### RATINGS & CHARACTERISTICS

Cat. No.	Power Diss., Watts	Nom. Zener Voltage & Typical Dynamic Impedance			I <sub>Z</sub> Max.	Net Price
		E <sub>Z</sub> (Volts) @ I <sub>Z</sub> (ma)	Z <sub>Z</sub> (ohms) @ I <sub>Z</sub>			
1EZ5.6T10	1	5.6	18	12	90	\$3.00
1EZ6.8T10	1	6.8	15	2	73	3.00
1EZ8.2T10	1	8.2	12	2	60	3.00
1EZ10T10	1	10	10	2.5	50	3.00
1EZ12T10	1	12	8	3.2	40	3.00
1EZ15T10	1	15	7	6	33	3.00
1EZ18T10	1	18	6	18	28	3.00
1EZ22T10	1	22	5	26	22	3.00
1EZ27T10	1	27	4	55	18	3.00
10EZ5.6T10	10	5.6	350	.3	1750	\$4.90
10EZ6.8T10	10	6.8	300	.2	1500	4.90
10EZ8.2T10	10	8.2	250	.25	1200	4.90
10EZ10T10	10	10	200	.55	1000	4.90
10EZ12T10	10	12	170	.95	850	4.90
10EZ15T10	10	15	140	1.5	650	4.90
10EZ18T10	10	18	110	2	550	4.90
10EZ22T10	10	22	90	3	450	4.90
10EZ27T10	10	27	70	4.5	350	4.90



## PHOTOCELLS, SUN BATTERIES & CADMIUM SULPHIDE CELLS

FIRST CHOICE OF EXPERIMENTERS, LABORATORIES AND INDUSTRY THE WORLD OVER



POPULAR EXPERIMENTER'S TYPES — LOW COST, YET EFFICIENT AND EASY TO MOUNT



For the experimenter and hobbyist, I.R. offers a specially selected line, low priced—yet efficient, rugged and easy to mount and connect.

These cells and sun batteries may be used for numerous applications and experiments including the powering of transistorized radios, building light meters, operating small motors from sunlight, etc.

Selenium cells are inexpensive, rugged and have a spectral response similar to the human eye, thus are used extensively in light meters. Silicon cells have higher light conversion efficiency (greater output) particularly in sunlight. The S1M type is of the same construction as used for battery charging in space vehicles.

### INDUSTRIAL TYPE SELENIUM PHOTOCELLS



### INDUSTRIAL TYPE SELENIUM PHOTOCELLS

International Rectifier makes the widest line of selenium photocells, used widely in the photographic industry, in light meters, automatic still and movie cameras and other optical applications.

Selenium cells have a spectral response similar to the human eye, making them ideal for such application. Other uses for selenium photocells are actuating of control devices, operating doors, turning street and store lighting on and off automatically, controlled counting, inspection devices, etc.

Bulletin PC-649A, available free on request, gives detailed characteristics and technical information on the IR line of selenium photovoltaic cells.

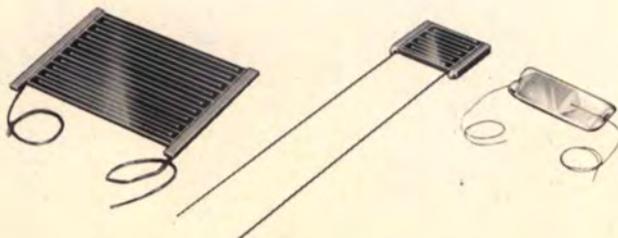
### INDUSTRIAL SILICON SOLAR CELLS



### INDUSTRIAL SILICON SOLAR CELLS

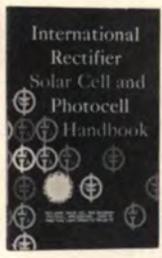
These cells are of higher efficiency than selenium cells and are used principally to convert solar energy directly into electricity. Applications include the operation of portable radios, charging batteries, rural telephone installations, etc. All S cells are supplied with flexible pigtail leads. SM type has turret terminals on back. For additional information request free 6 page bulletin No. SR 280.

### CADMIUM SULPHIDE PHOTO CONDUCTIVE CELLS.



### CADMIUM SULPHIDE PHOTO CONDUCTIVE CELLS.

These cells, in contrast to silicon and selenium cells, do not generate electricity directly, but are in effect, "light-sensitive resistors." They are particularly suited to operating relays, industrial counting devices, operating door openers, turning on street lights, burglar alarms, etc. Type CS-020-G8 is sealed in glass. Types CS-120-V6 and V16 are unmounted and will operate directly on 117 volt AC or DC. The type SC-120-M6 cell is identical to the SC-120-V6 cell, but enclosed in a plastic case, same as shown under B3M and S1M above.



**PHOTOCELL HANDBOOK . . . 112 pages** packed with the very latest data, plans, wiring diagrams on both silicon and selenium cells. Ask your distributor for your copy. Price: \$2.00

**POPULAR EXPERIMENTER'S TYPES**

Cat. No.	Description and Size	OUTPUT*		Net Price
		Volts	MA.	
B2M	Selenium cell with mounting bracket. Cell size 1/2 x 3/4"	0.2 to 0.4	2	\$1.50
B3M	Selenium cell in molded plastic case. Case Dim. 1 1/8 x 1 1/8 x 3/16"	0.2 to 0.4	1 1/2 - 2 1/2	1.75
S1M	Silicon cell in molded plastic case. Case Dim. 1 1/8 x 1 1/8 x 3/16"	0.3 to 0.4	10 - 16	2.25

All cells supplied with pigtail leads.  
\*In full sunlight, using conventional volt and milliamp meters.

**INDUSTRIAL TYPE SELENIUM PHOTOCELLS**

Cat. No.	Description	OUTPUT (Microamps) @ 100 foot-candles into 100 ohm load	Net Price
A5PL	Unmounted, 1 1/8" round	250	\$ 2.50
A10PL	Unmounted, 1 3/4" round	600	5.00
A15PL	Unmounted, 2" round	770	6.50
A5M	In molded case, 1 1/4" diam; 0.3" thick	220	7.00
A15M	In molded case, 2 1/8" diam; 0.3" thick	700	11.00
B2PL	Unmounted, 0.72 x 0.44"	77	1.50
B10PL	Unmounted, 1.69 x 0.88"	380	3.00
B10M	In molded case, 2.2" x 1.1" x 0.4"	320	7.00
B15PL	Unmounted, 1.69" x 1.69"	640	6.50
DP3	Hermet. sealed case	66	10.00
DP5	3/4" x 0.35" x 0.36" thick Hermet. sealed case 2" sq. x 2 3/4"	600	14.00

All "PL" type cells are supplied with 6" flexible leads. "M" Type cells have stud terminals. DP3 has plug-in type pins. DP5 has solder terminals.

**INDUSTRIAL TYPES, SILICON SOLAR CELLS**

Cat. No.	Description	Output*		Net Price
		Volts	MA	
S 1020E4-PL	Unmounted, 0.4 x 0.8 (1X2cm)	0.40	18	\$2.65
S 1020E6-PL	Unmounted, 0.4 x 0.8 (1X2cm)	0.40	27	2.95
S 1020E8-PL	Unmounted, 0.4 x 0.8 (1X2cm)	0.40	36	3.85
5SM 1020E6	5 E-6 cells in series; mounted size 2 1/2 x 7/8"	1.85	29	13.20

\*In full sunlight, using conventional volt and milliamp meters.

**CADMIUM SULPHIDE PHOTO CONDUCTIVE CELLS.**

Cat. No.	APPROX. SIZE	MAX. APPLIED VOLTAGE	MAX. POWER DISSIPATION	Approx. Resist (OHMS)			Net Price
				Dark	10 FC Illum.	100 FC Illum.	
CS-020-G8	1/2" x 1" x 1/8"	20	50 MW	.5 Meg	5000	1000	\$4.50
CS-120-V6	1/2" x 3/4" x 1/16"	120	.2 Watt	1.5 Meg	10,000	2000	1.95
CS-120-M6	1 1/8" x 1 1/8" x 3/16"	120	.2 Watt	1.5 Meg	10,000	2000	2.35
CS-120-V16	2" x 1" x 1/16"	120	1 Watt	.5 Meg	5000	1000	3.50

All Types Supplied With Pigtail Leads.

**Silicon tube replacement semi-conductor rectifiers for direct plug-in replacement of rectifier tubes**



This very comprehensive line of solid-state rectifier devices is designed to replace many medium and high voltage tubes in power supplies of industry, broadcasting stations, two-way communications, etc.

The many advantages of these silicon devices include rugged construction, long life and extreme dependability, no warmup time, no filament power supply requirement, less weight and lower operating temperature.



**TYPICAL RATINGS, CHARACTERISTICS & TUBE REPLACEMENT TYPES**

Int'l Type No.	Jedec No.	PRV (Per Section) Volts	Max. RMS Input, Volts	Max. DC Output Ma @ 75°C	Average Volt. Drop, Volts	Max. Dimensions (Inches)		Replaces Tube Types:	Net Price
						L	D		
ST-1	IN2630	1500	1050	85	2.25	1.75	0.87	6X4, 12X4	\$ 13.00
ST-1A	IN570	1500	1050	75	4.0			MIL 6X4, MIL 12X4	30.00
ST-2	IN2631	1600	1130	600	3.0	2.65	1.25	5A4, 5X4, 5A24, 5AU4, 5W4	13.00
ST-2A	IN2632	2800	1950	250	6.0	2.65	1.25	5R4, 5R4W	20.45
ST-3	IN2633	1600	1130	600	3.0	2.65	1.25	6AX5, 6W5, 6X5, 6ZY5, 024, 5839, 5852, 5X4	13.00
ST-4	IN2634	1600	1130	600	3.0	2.65	1.25	5Z3, 80, 82, 83, 83V	13.00
ST-5	IN2635	1500	1050	85	2.25	1.75	0.87	6X4, 12X4 (High Altitude Types)	14.40
ST-6	IN2636	1500	1050	85	2.25	2.45	1.19	84/624	14.40
ST-7A	-	10,500	7500	250	28.0	5.05	1.38	86	28.25
ST-8	-	1250	880	80	3.9	1.10	1.40	024, 6X5	13.00
ST-9	-	10,000	7000	1250	32	8.03	2.13	8008	137.50
ST-10	-	10,000	7000	1250	32	8.18	2.31	872A	137.50



**Semicap voltage variable capacitor**

This voltage-sensitive device provides precision capacity control along with high reliability and small power requirement. "SEMICAPS" are useful in variable frequency oscillators, in AFC and modulation circuits, in band pass and filter network. They are small, sensitive, very reliable devices with a Q of 1000 (plus) for #6.8 SC20 and about 100 for #100SC2 at 1 MC.

Cat. No.	Capacity Range	Frequency Range	Peak Signal Plus Bias Voltage Range	Net Price
6.8 SC20	3 to 30 UUF	1-500 MC	.1 to 200 V.D.C.	\$1.10
100 SC2	80 to 450 UUF	1-500 MC	.1 to 20 V.D.C.	2.75



# HERMETICALLY SEALED AND "QUAD-SEALED" SILICON POWER RECTIFIERS

A wide, wide range of industrial power diodes rated from ½ amp up to 250 amps to cover almost every medium and high power supply rectifier application . . . including motor control, instrumentation, voltage multiplying, electroplating, welding, battery charging . . . wherever superior silicon operation, miniaturization and rugged construction is required. Available in hermetically sealed "top hat" and stud mounted construction for applications calling for high temperature operation . . . as well as economy "Quad-Sealed" units in both stud mounted and triangular base configurations specifically designed for limited space applications. "Quad-Sealed" rectifiers feature low unit cost along with operation to 130°C. A 4-layer seal on each "Quad-Sealed" junction assures optimum operation on a wide range of commercial and industrial electronic applications.



**RECTIFIER ENGINEERING HANDBOOK . . .** The complete "what, where and why" of silicon and selenium rectifier application. Get this 130-page book from your local distributor now. Price: \$2.00.



## TOP HAT HERMETICALLY SEALED SILICON DIODES

RATINGS @ 50°C

Cat. No.	Peak Reverse Voltage	RMS Input Voltage	DC Output Current, MA	Net Price
SD-91	100	70	550	\$ .65
SD-92	200	140	550	.80
SD-93	300	210	550	.95
SD-94	400	280	550	1.15
SD-95	500	350	550	1.25

## 100 AMP "QUAD SEALED" BATTERY CHARGING RECTIFIER



This unit is designed as a replacement for the new types of fast chargers using silicon rectifiers. The BC101 consists of two silicon cells mounted on a 4" x 6" cooling fin, to make a complete unit for center tap circuit.

The BC101 is rated at 100 amps, 6 or 12 volt, with fan cooling (750 L.F.M.). Rating using natural convection cooling is 40 amps. This unit may be operated from sub-zero to elevated temperatures (130°C) and is extremely rugged.

Cat. No. BC101

Net Price \$15.00

\*See page 10 for selenium battery charger replacements.





## MULTIPLE PURPOSE



Cat. No.	Output		Max. Input AC Volts	Circuit & Connecting Diag. Fig.	Dimensions (Inches)						Net Price	
	DC Volts	DC Amp			Fig.	A	B	MD	X	Y		Stud
J14C04	0	0.4	36	1	A	1	1	1 1/8	3/8	1/4	8-32	\$ .95
J14C1	to	1.5	36	1	A	1 1/2	1 1/2	1 1/8	3/8	3/16	8-32	1.39
J14C5	to	4.8	36	1	A	3	3	1 1/8	3/4	3/8	3/8-16	3.48
J14C8	to	8.4	36	1	A	4	4	1 7/8	3/4	1 1/8	3/8-16	4.89
J14C17	14	17.0	36	1	A	6	5	2 1/8	3/4	1 1/4	3/8-16	7.55
J29B04	0	0.4	36	2	B	1	1	1 1/2	3/8	1/4	8-32	2.36
J29B1	to	1.5	36	2	B	1 1/2	1 1/2	1 1/2	3/8	3/16	8-32	2.28
J29B5	to	4.8	36	2	B	3	3	2 3/8	3/4	3/8	3/8-16	6.43
J29B8	to	8.4	36	2	B	4	4	2 3/8	3/4	1 1/8	3/8-16	8.93
J29B17	29	17.0	36	2	B	6	5	3 1/4	3/4	1 1/4	3/8-16	13.27
J58B04	0	0.4	72	2	B	1	1	2 1/4	3/8	1/4	8-32	3.11
J58B1	to	1.5	72	2	B	1 1/2	1 1/2	2 1/4	3/8	3/16	8-32	4.49
J58B5	to	4.8	72	2	B	3	3	4 1/8	3/4	3/8	3/8-16	12.08
J58B8	to	8.4	72	2	B	4	4	4 7/8	3/4	1 1/8	3/8-16	16.75
J58B17	58	17.0	72	2	B	6	5	5 5/8	3/4	1 1/4	3/8-16	26.52
J116B04	0	0.4	144	2	B	1	1	3 1/8	3/8	1/4	8-32	5.56
J116B1	to	1.5	144	2	B	1 1/2	1 1/2	3 1/8	3/8	3/16	8-32	8.15
J116B5	to	4.8	144	2	B	3	3	7 7/8	3/4	3/8	3/8-16	22.91
J116B8	to	8.4	144	2	B	4	4	7 7/8	3/4	1 1/8	3/8-16	32.09
J116B17	116	17.0	144	2	B	6	5	10 1/4	3/4	1 1/4	3/8-16	50.45
J135B04	0	0.4	180	2	B	1	1	4 1/8	3/8	1/4	8-32	6.77
J135B1	to	1.5	180	2	B	1 1/2	1 1/2	4 1/8	3/8	3/16	8-32	9.93
J135B5	to	4.8	180	2	B	3	3	8 1/8	3/4	3/8	3/8-16	28.29
J135B8	to	8.4	180	2	B	4	4	8 1/8	3/4	1 1/8	3/8-16	39.71
J135B17	135	17.0	180	2	B	6	5	12 1/8	3/4	1 1/4	3/8-16	62.43

### INDUSTRIAL SELENIUM RECTIFIER STACKS

These new J Type "High Density Stack" rectifiers will deliver twice the output of standard selenium types on a wide range of rectifying applications, including power supplies and voltage regulation, plate voltages and filament supply, plating and electrolysis, battery charging,

relays, circuit breakers and numerous communication systems. Rated from 0.4 to 17 amperes dc output at from 1 to 135 volts dc output, they also possess high inverse voltage ratings and outstanding ability to handle temporary overloads.

### STANDARD DENSITY JD TYPE SELENIUM STACKS

Proven in millions of applications over many years. They are extra rugged and used in such diverse applications as battery charging, electro-plating, power supplies for

motors, motor speed control, generator fields, arc lamps and motion picture projectors.

Cat. No.	Output		Max. Input AC Volts	Circuit & Connecting Diag. Fig.	Dimensions (Inches)						Net Price	
	DC Volts	DC Amp			Fig.	A	B	MD	X	Y		Stud
JD-507G	0-20	0.4	26	2	A	1 1/4	1 1/4	1 1/2	3/8	3/8	8-32	\$ 1.53
JD-508G	0-20	0.7	26	2	A	1 1/2	1 1/2	1 1/2	3/8	5/16	8-32	1.77
JD-3022	0-20	1.5	26	2	A	2	2	1 7/8	3/8	5/8	1/4-20	2.79
JD-510G	0-20	3.0	26	2	A	3	3	2 5/8	3/4	5/8	3/8-16	5.01
JD-511P	0-20	5.5	26	2	A	4	4	2 5/8	3/4	1 1/8	3/8-16	7.05
JD-515G	0-40	0.7	52	2	B	1 1/2	1 1/2	2 5/8	3/8	5/16	8-32	3.51
JD-3023	0-40	1.5	52	2	B	2	2	3	3/8	5/8	1/4-20	5.57
JD-517G	0-40	3.0	52	2	B	3	3	4 1/8	3/4	5/8	3/8-16	9.99
JD-3012	0-100	0.3	130	2	B	1 1/4	1 1/4	4 1/8	3/8	3/8	8-32	6.48
JD-3007	0-100	0.6	130	2	B	1 1/2	1 1/2	4 1/8	3/8	5/16	8-32	7.68
JD-3008	0-100	1.2	130	2	B	2	2	6 1/4	3/8	5/8	1/4-20	11.79

### BATTERY CHARGER REPLACEMENTS

Type JD 4346B is the most universal rectifier for commercial "fast chargers" as used in service stations. It fits many makes and models without circuit or mechanical modifications.

Single plate rectifiers are used for replacement of low-

current chargers such as used at home, as "trickle" type in garages and for constant current models. By using single plates of proper size, any current rating and circuit configuration (e.g. center tap, bridge, etc.) may be assembled.

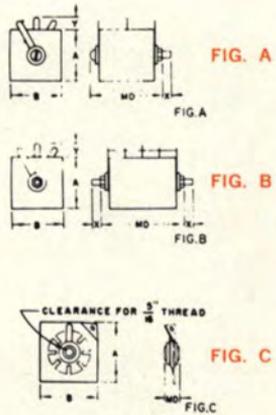
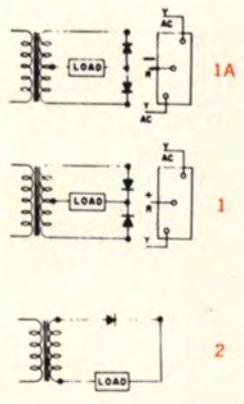
Cat. No.	Output		Max. Input AC Volt	Circuit Connecting Diag. Fig.	Dimensions						Net Price	
	DC Volt	DC Amp			Fig.	A	B	MD	X	Y		Stud
JD4346B*	6-12	30-100**	16.5-0-16.5	1A	B	6	5	4 1/8	3/4	1 1/8	3/8-16	\$16.75
JD4346D	6-12	30-100**	16.5-0-16.5	1	B	6	5	4 1/8	3/4	1 1/8	3/8-16	16.75
JD116K	6-12	2 (Note A)	16.5-0-16.5	1 or 2	C	3	3	1 1/2	—	—	—	1.20
JD117K	6-12	3 (Note A)	16.5-0-16.5	1 or 2	C	4	4	1 1/2	—	—	—	1.80
JD241K	6-12	6 (Note A)	16.5-0-16.5	1 or 2	C	6	5	1 1/2	—	—	—	2.46
JD240K	6-12	9 (Note A)	16.5-0-16.5	1 or 2	C	7 1/2	6 1/2	1 1/2	—	—	—	3.40

\*Most popular type. \*\*30 without fan—100 with fan rated @ 800 LFM.

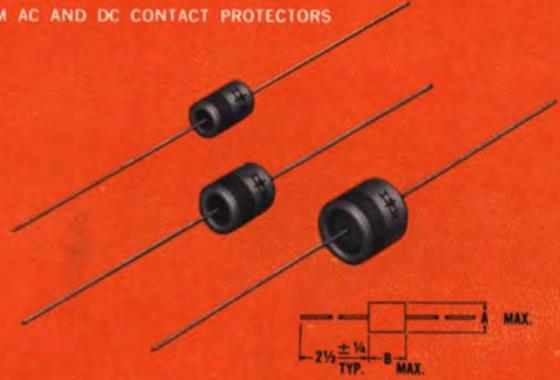
Note A: Ratings shown for half wave. Two plates in center-tap circuit have twice this rating.

# SELENIUM RECTIFIER STACKS AND CONTACT PROTECTORS

CIRCUITS AND DIMENSIONS FOR ALL SELENIUM RECTIFIERS



SELENIUM AC AND DC CONTACT PROTECTORS



SELENIUM AC AND DC CONTACT PROTECTORS

Make your circuits *really* secure against arcing, flashover and erosion across relay, switch and other component contacts with these low cost, high efficiency contact protectors. Available in both ac and dc types covering a broad range of current and voltage values, these miniature devices are equipped with pigtail leads for fast, easy insertion into all circuits. In specifying contact protectors, it is important that the maximum voltage rating of the protector exceeds the maximum value of the supply voltage. For additional data, write for Bulletin #SR-150-A.



## ELECTRONIC RANGE SELENIUM RECTIFIERS

These half wave, full wave and miniature bridge rectifiers are designed for use in numerous electronic and instrumentation applications. They will provide stable voltage, occupy a minimum of space, are conservatively rated and easy to install.

## SINGLE PLATE HALF WAVE RECTIFIERS

Cat. No.	Max. DC MA	Max. RMS Volts	Min. Series Resistor Ohms	Dimensions			Net Price
				A	B	Max. MD	
Q1H	65	25	47	.67"	.67"	7/16"	\$.36
A1H	100	25	22	1"	1"	7/16"	.38
B1H	150	25	15	1.2"	1.2"	7/16"	.40
C1H	250	25	5	1.5"	1.5"	7/16"	.42
M1H	500	25	5	2"	2"	7/16"	.56

## FULL WAVE BRIDGE RECTIFIERS

Cat. No.	Max. DC MA	Max. RMS Volts	Dimensions			Net Price
			A	B	Max. MD	
Q1B	100	25	.67"	.67"	3/4"	.84
Q4B	100	130	.67"	.67"	1 1/8"	1.56
A1B	180	25	1"	1"	3/4"	1.22
B1B	300	25	1.2"	1.2"	3/4"	1.28
C1B	600	25	1.5"	1.5"	3/4"	1.46
M1B	1200	25	2"	2"	3/4"	1.72

## MINIATURE BRIDGE RECTIFIERS

Cat. No.	Max. DC MA	Max. RMS Volts	A	B	Max. MD	Net Price
D3575F	100	130	2 1/32"	2 1/32"	1 1/4"	1.56
60-9150*	100	260	2 1/32"	2 1/32"	1 1/4"	1.56
61-4037	100	260	2 1/32"	2 1/32"	1 7/8"	3.10

\*60-9150 is a doubler stack. Ratings are for 2 stacks connected as a full wave bridge. Half wave and doubler ratings are one-half of those shown in rating table.

## AC TYPES

Cat. No.	Dimension A (Max.) B	Working Volts AC Max.	Max. Coil Current (Amp)	Net Price (1-9 pc.)
S1V1P	.380 .620	26	.20	\$.89
S2V2P	.380 .620	52	.20	1.07
S3V3P	.380 .620	78	.20	1.08
S4V4P	.380 .620	104	.20	1.26
S5V5P	.380 .620	130	.20	1.40
S6V6P	.380 .990	156	.20	1.42
S1Y1P	.500 .620	26	.40	.94
S2Y2P	.500 .620	52	.40	1.13
S3Y3P	.500 .620	78	.40	1.14
S4Y4P	.500 .620	104	.40	1.38
S5Y5P	.500 .620	130	.40	1.56
S6Y6P	.500 .990	156	.40	1.58
S1Z1P	.640 .620	26	.60	1.35
S2Z2P	.640 .620	52	.60	1.65
S3Z3P	.640 .620	78	.60	1.93
S4Z4P	.640 .620	104	.60	2.27
S5Z5P	.640 .620	130	.60	2.49
S6Z6P	.640 .990	156	.60	2.72
S1X1P	1.060 .620	26	.90	1.59
S2X2P	1.060 .620	52	.90	1.91
S3X3P	1.060 .620	78	.90	2.27
S4X4P	1.060 .620	104	.90	2.67
S5X5P	1.060 .620	130	.90	2.98
S6X6P	1.060 .990	156	.90	3.29
S1W1P	1.380 .620	26	1.2	1.87
S2W2P	1.380 .620	52	1.2	2.22
S3W3P	1.380 .620	78	1.2	2.66
S4W4P	1.380 .620	104	1.2	3.14
S5W5P	1.380 .620	130	1.2	3.50
S6W6P	1.380 .990	156	1.2	3.87

## DC TYPES

Type No.	Dimension A (Max.) B	Working Volts DC Min. Max.	Max. Coil Current (Amp)	Net Price
S1V1P	.380 .620	15 22	.25	\$.89
S2V1P	.380 .620	23 44	.25	.90
S3V2P	.380 .620	45 66	.25	1.07
S4V2P	.380 .620	67 88	.25	1.08
S5V2P	.380 .620	89 110	.25	1.24
S6V2P	.380 .620	111 132	.25	1.25
S7V2P	.380 .620	133 154	.25	1.26
S1Y1P	.500 .620	15 22	.60	.94
S2Y1P	.500 .620	23 44	.60	.94
S3Y2P	.500 .620	45 66	.60	1.14
S4Y2P	.500 .620	67 88	.60	1.14
S5Y2P	.500 .620	89 110	.60	1.36
S6Y2P	.500 .620	111 132	.60	1.37
S7Y2P	.500 .620	133 154	.60	1.38
S1Z1P	.640 .620	15 22	.90	1.35
S2Z1P	.640 .620	23 44	.90	1.47
S3Z2P	.640 .620	45 66	.90	1.74
S4Z2P	.640 .620	67 88	.90	1.93
S5Z2P	.640 .620	89 110	.90	2.12
S6Z2P	.640 .620	111 132	.90	2.27
S7Z2P	.640 .620	133 154	.90	2.38
S1X1P	1.060 .620	15 22	1.4	1.59
S2X1P	1.060 .620	23 44	1.4	1.74
S3X2P	1.060 .620	45 66	1.4	2.06
S4X2P	1.060 .620	67 88	1.4	2.27
S5X2P	1.060 .620	89 110	1.4	2.50
S6X2P	1.060 .620	111 132	1.4	2.67
S7X2P	1.060 .620	133 154	1.4	2.83
S1W1P	1.380 .620	15 22	2	1.87
S2W1P	1.380 .620	23 44	2	2.04
S3W2P	1.380 .620	45 66	2	2.41
S4W2P	1.380 .620	67 88	2	2.66
S5W2P	1.380 .620	89 110	2	2.93
S6W2P	1.380 .620	111 132	2	3.14
S7W2P	1.380 .620	133 154	2	3.31

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**RIGID QUALITY CONTROL . . .** Because of International Rectifier's consistent record of manufacturing semiconductors meeting or exceeding the highest government and trade standards, they are one of the select few electronic manufacturers qualified to produce under the United States Army Signal Corps Honor Inspection Program — RIQAP — REDUCED INSPECTION QUALITY ASSURANCE PLAN.

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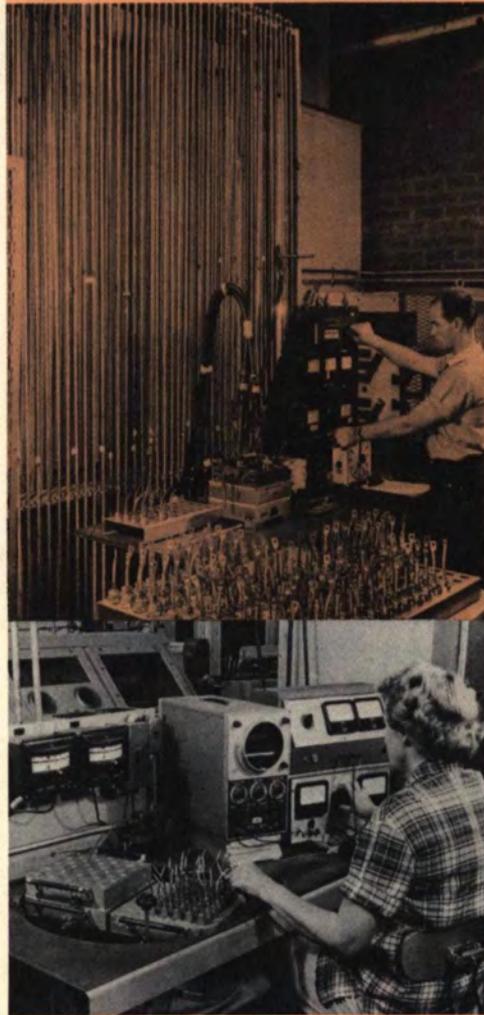
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