

# EDAL

## Bridges

The compact design offered by Edal printed circuit board, medium and high current bridges offers a significant reduction in space requirements. This is a direct result of the ability of these units to accommodate maximum power per unit size and withstand high transient energy. Faster assembly is now possible since the need for soldering many diodes to achieve equivalent circuitry has been eliminated. Inventories may be reduced

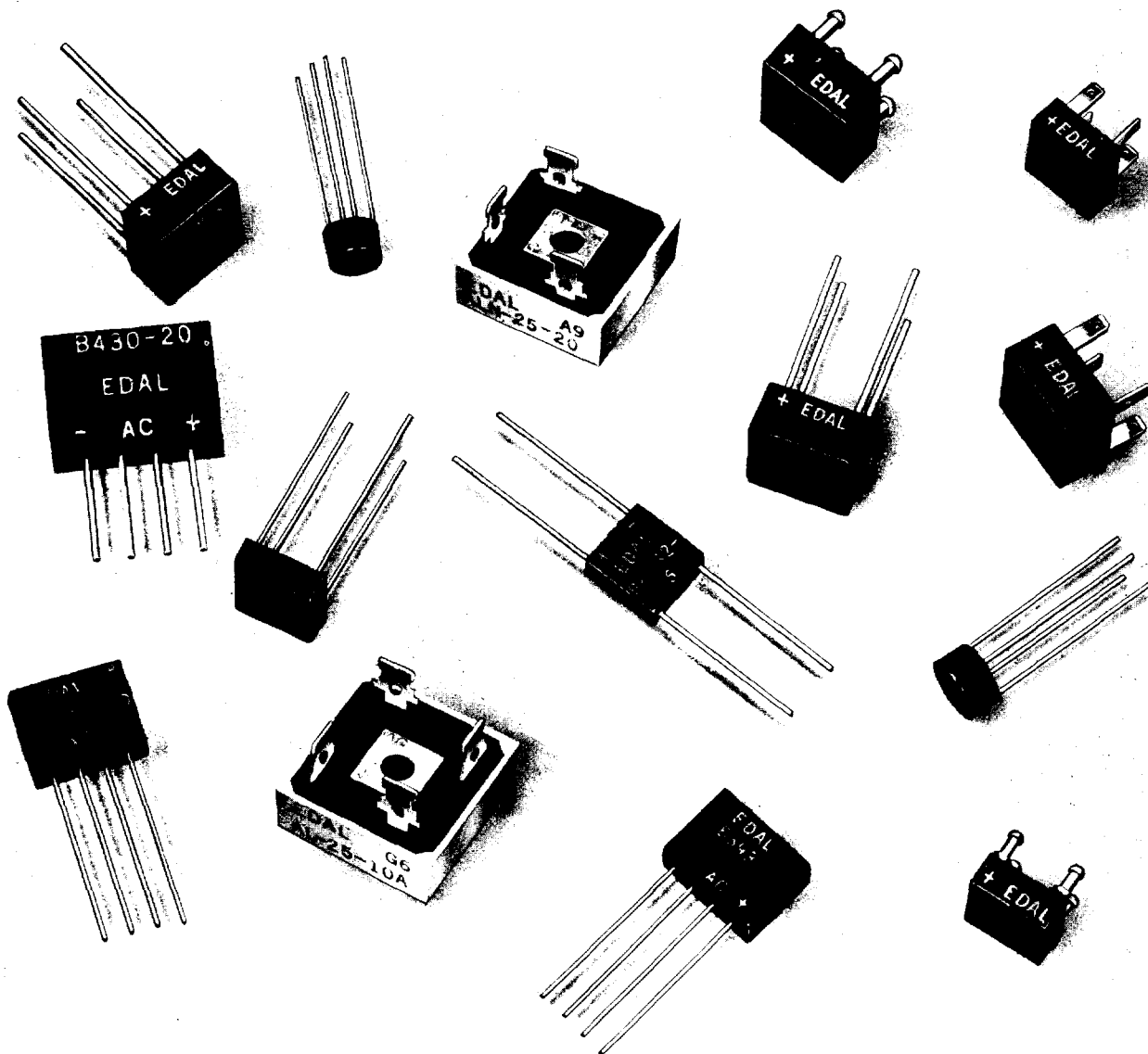
and purchasing procedures simplified.

Printed circuit board bridges provide the low silhouette ideal for stacking miniature circuit cards. High reliability is assured with double diffused passivated junctions in a cold case design.

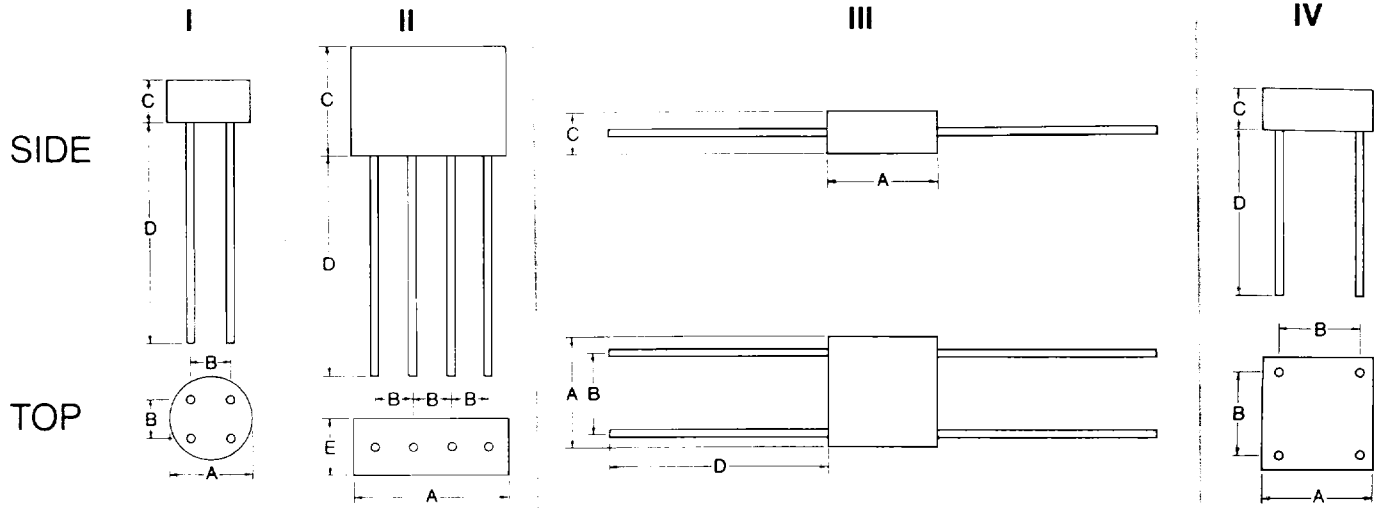
Medium current bridges incorporate the same basic design as printed circuit board types. Termination is optional to contain wire leads for plug-in or simple terminal strip mounting, turret type or quick con-

nect terminals. Holes or studs provide optional mounting.

High current bridges provide maximum thermal conductivity with three way terminals to utilize quick connect, wire wrap or wire insert through hole versatility. Mounting is by means of a center hole for a no. 10 screw. This design is also available in center tap or doubler configuration. Most bridges are available in both bulk avalanche and fast recovery types.



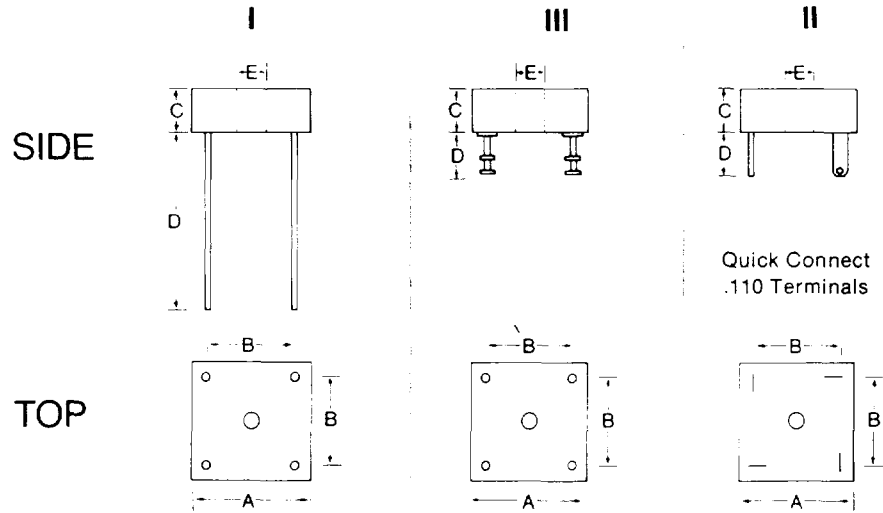
# Printed Circuit Board Bridges



Mechanical Specifications							
Part Number	Style	A	B	C	D	E	Lead Diameter
B654	I	.330	.200	.210	3/4		.025
B376	I	3/8	.200	3/16	3/4		.032
B285	II	1 1/16	.150	1/2	1	1/4	.032
B442	II	1 1/16	.150	1/2	1	1/4	.032
BA232	III	1/2	.375	3/16	1		.032
BA172	IV	1/2	.375	3/16	3/4		.032
B393	II	1 1/16	.150	1/2	1	1/4	.032
BA430	II	1	.200	3/4	5/8	1/4	.040
BA191	IV	5/8	.425	5/16	3/4		.050

Electrical Specifications									
Maximum Forward Current Single Phase Full Wave At 55°C I <sub>o</sub> Amps	1.0	1.5		2.0		3.0	4.0	4.0	
Maximum Surge Current Single Cycle Amps	30	30		60		90	200	200	
Maximum Forward Drop at 25°C I <sub>o</sub> Amps (Full Wave) V Volts (Per Section)	1.0 1.2	1.5 1.2		2.0 1.2		3.0 1.2	6.0 1.2	6.0 1.2	6.0 1.2
Maximum Reverse Current at 25°C FCA at 100°C FCA	5 μa .5 ma	10 μa .5 ma		5 μa .5 ma		7.5 μa .5 ma	10 μa .5 ma	10 μa .5 ma	10 μa .5 ma
PIV									
50	B654-5	B376-5	B285-5	B442-5	BA232-5	BA172-5	B393-5	BA430-5	BA191-5
100	B654-10	B376-10	B285-10	B442-10	BA232-10	BA172-10	B393-10	BA430-10	BA191-10
200	B654-20	B376-20	B285-20	B442-20	BA232-20	BA172-20	B393-20	BA430-20	BA191-20
300	B654-30	B376-30	B285-30	B442-30	BA232-30	BA172-30	B393-30	BA430-30	BA191-30
400	B654-40	B376-40	B285-40	B442-40	BA232-40	BA172-40	B393-40	BA430-40	BA191-40
500	B654-50	B376-50	B285-50	B442-50	BA232-50	BA172-50	B393-50	BA430-50	BA191-50
600	B654-60	B376-60	B285-60	B442-60	BA232-60	BA172-60	B393-60	BA430-60	BA191-60
700	B654-70	B376-70	B285-70	B442-70	BA232-70	BA172-70	B393-70	BA430-70	BA191-70
800	B654-80	B376-80	B285-80	B442-80	BA232-80	BA172-80	B393-80	BA430-80	BA191-80
900	B654-90	B376-90	B285-90	B442-90	BA232-90	BA172-90	B393-90	BA430-90	BA191-90
1000	B654-100	B376-100	B285-100	B442-100	BA232-100	BA172-100	B393-100	BA430-100	BA191-100
1200	B654-120	B376-120	B285-120	B442-120	BA232-120	BA172-120	B393-120	BA430-120	BA191-120

# Medium Current Bridges



Mechanical Specifications							
Part Number	Style	A	B	C	D	E*	Lead Diameter
B172	I	1/2	.375	3/16	3/4	.145	.032
B272	II	1/2	.375	3/16	5/16	.145	
B372	III	1/2	.375	3/16	3/16	.145	
B191	I	5/8	.425	5/16	3/4	.145	.050
B291	II	5/8	.425	5/16	5/16	.145	
B391	III	5/8	.425	5/16	3/16	.145	
B610	I	5/8	.425	5/16	3/4	.145	.050

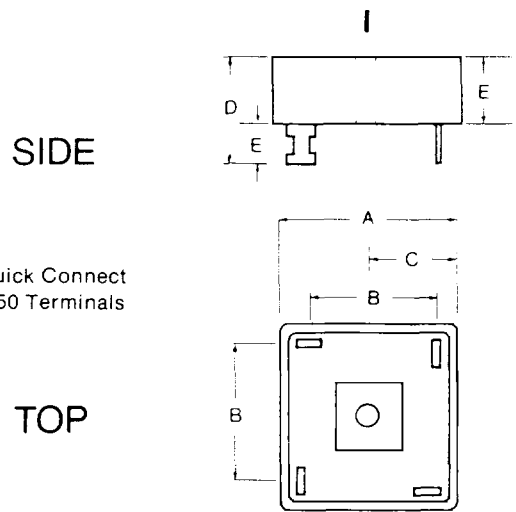
\*Available with stud mounting.

Electrical Specifications							
Maximum Forward Current Single Phase Full Wave At 55°C I <sub>o</sub> Amps*	4.0			6.0			10.0
Maximum Surge Current Single Cycle Amps	60			200			200
Maximum Forward Drop at 25°C I <sub>o</sub> Amps (Full Wave) V Volts (Per Section)	2.0 1.0			6.0 1.0			6.0 1.0
Maximum Reverse Current at 25°C FCA at 100°C FCA	5 μa .5 ma			10 μa .5 ma			10 μa 1 ma
PIV							
50	B172-5	B272-5	B372-5	B191-5	B291-5	B391-5	B610-5
100	B172-10	B272-10	B372-10	B191-10	B291-10	B391-10	B610-10
200	B172-20	B272-20	B372-20	B191-20	B291-20	B391-20	B610-20
300	B172-30	B272-30	B372-30	B191-30	B291-30	B391-30	B610-30
400	B172-40	B272-40	B372-40	B191-40	B291-40	B391-40	B610-40
500	B172-50	B272-50	B372-50	B191-50	B291-50	B391-50	B610-50
600	B172-60	B272-60	B372-60	B191-60	B291-60	B391-60	B610-60
700	B172-70	B272-70	B372-70	B191-70	B291-70	B391-70	B610-70
800	B172-80	B272-80	B372-80	B191-80	B291-80	B391-80	B610-80
900	B172-90	B272-90	B372-90	B191-90	B291-90	B391-90	B610-90
1000	B172-100	B272-100	B372-100	B191-100	B291-100	B391-100	B610-100
1200	B172-120	B272-120	B372-120	B191-120	B291-120	B391-120	B610-120

\*Current rating when heat sinked

All available in bulk avalanche and fast recovery series.

# High Current Bridges

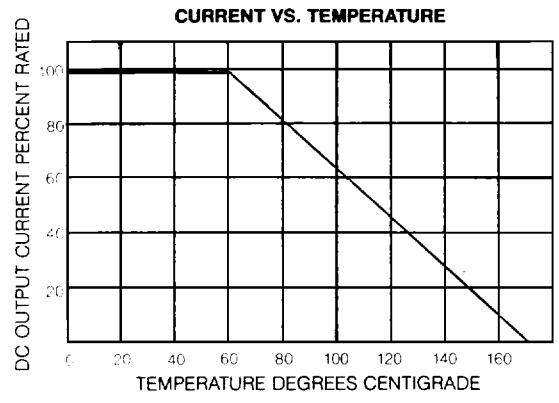
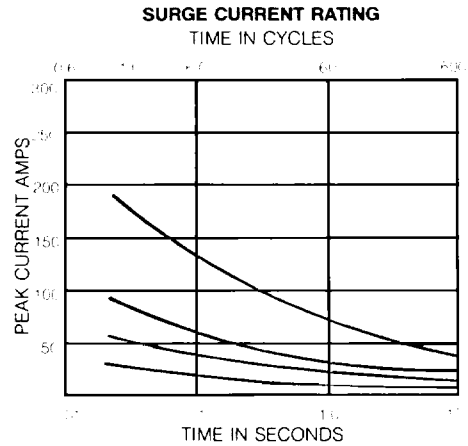
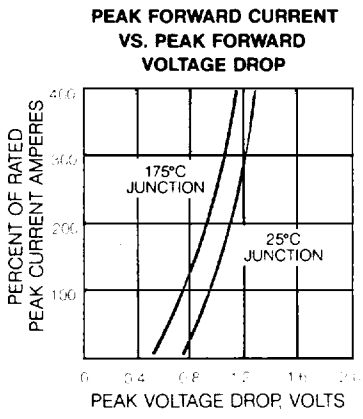


Mechanical Specifications							
Part Number	Style	A	B	C	D	E	Hole Diameter
AL-10	I	1 1/8	5/8	9/16	1.0	13/32	.196
AL-12	I	1 1/8	5/8	9/16	1.0	13/32	.196
AL-15	I	1 1/8	5/8	9/16	1.0	13/32	.196
AL-20	I	1 1/8	5/8	9/16	1.0	13/32	.196
AL-25	I	1 1/8	5/8	9/16	1.0	13/32	.196
AL-30	I	1 1/8	5/8	9/16	1.0	13/32	.196

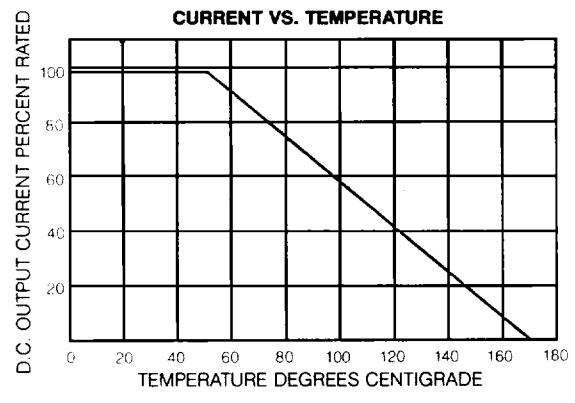
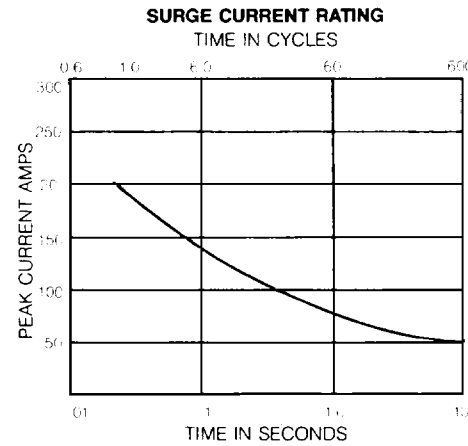
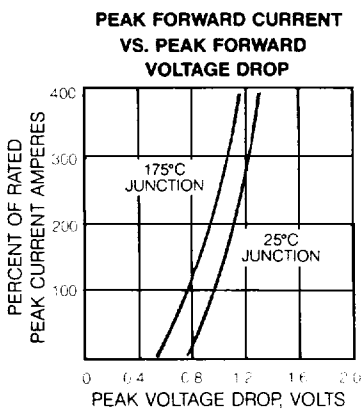
Electrical Specifications						
Maximum Forward Current Single Phase Full Wave At 55°C I <sub>o</sub> Amps	10	12	15	20	25	30
Maximum Surge Current Single Cycle Amps	250	250	250	300	300	300
Maximum Forward Drop at 25°C I <sub>o</sub> Amps (Full Wave) V Volts (Per Section)	10 1.2	12 1.2	15 1.2	20 1.2	20 1.2	20 1.2
Maximum Reverse Current at 25°C FCA at 100°C FCA	15 μa .5 ma	15 μa .5 ma	15 μa .5 ma	30 μa .5 ma	30 μa .5 ma	30 μa .5 ma
PIV						
50	AL-10-5	AL-12-5	AL-15-5	AL-20-5	AL-25-5	AL-30-5
100	AL-10-10	AL-12-10	AL-15-10	AL-20-10	AL-25-10	AL-30-10
200	AL-10-20	AL-12-20	AL-15-20	AL-20-20	AL-25-20	AL-30-20
300	AL-10-30	AL-12-30	AL-15-30	AL-20-30	AL-25-30	AL-30-30
400	AL-10-40	AL-12-40	AL-15-40	AL-20-40	AL-25-40	AL-30-40
500	AL-10-50	AL-12-50	AL-15-50	AL-20-50	AL-25-50	AL-30-50
600	AL-10-60	AL-12-60	AL-15-60	AL-20-60	AL-25-60	AL-30-60
700	AL-10-70	AL-12-70	AL-15-70	AL-20-70	AL-25-70	AL-30-70
800	AL-10-80	AL-12-80	AL-15-80	AL-20-80	AL-25-80	AL-30-80
900	AL-10-90	AL-12-90	AL-15-90	AL-20-90	AL-25-90	AL-30-90
1000	AL-10-100	AL-12-100	AL-15-100	AL-20-100	AL-25-100	AL-30-100
1200	AL-10-120	AL-12-120	AL-15-120	AL-20-120	AL-25-120	AL-30-120

Also available in center tap and doubler configuration as well as bulk avalanche and fast recovery types.

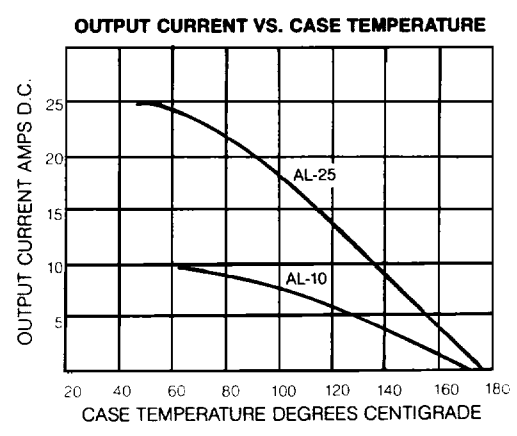
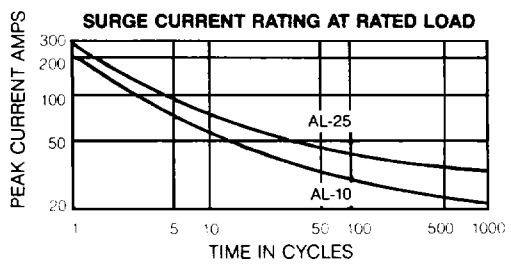
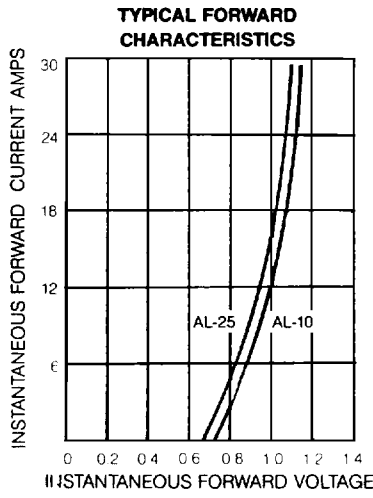
# PC Board Curves



# Medium Current Curves



# High Current Curves



# Other Edal Products

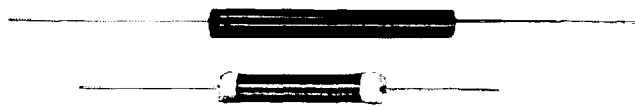
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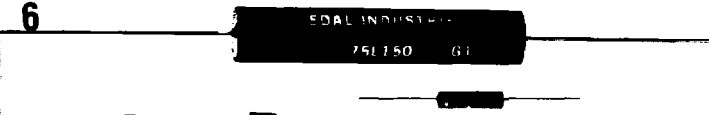
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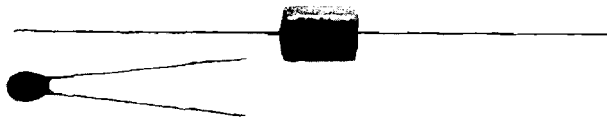
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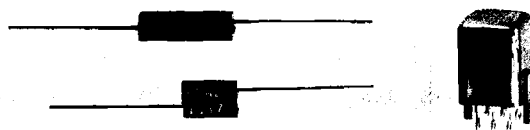
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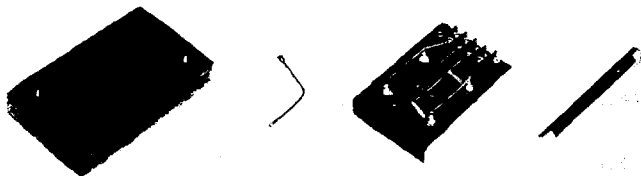
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9



## 1 Silicon Diodes

Miniature and medium current rectifiers. Reliable operation under extreme humidity and other severe environmental conditions. Flexible axial leads. Compact construction. Stable, uniform electrical characteristics.

## 2 Silicon Power Rectifiers

Stud-mounted rugged, hermetically sealed units. D04, D05, D08 and D09 configurations.

## 3 Selenium High Voltage Rectifiers

Produced on thinner base high voltage material. Offer substantial reductions in length. Available in hermetic sealed, phenolic enclosed, metal and ferrules, axial and radial leads.

## 4 Copper Oxide Instrument Rectifiers

High quality, stabilized rectifiers for instrument applications.

## 5 Selenium Power Rectifiers

For industrial and commercial applications requiring high quality and reliability. Both high voltage and high density type cells which allow considerable reduction of space for a given rating.

## 6 Silicon High Voltage Rectifiers

Subminiature epoxy package to larger cartridge types. Minimum size with maximum power. New standards of reliability.

## 7 Selenium Arc Suppressors/ Contact Protectors

Ruggedly constructed tubular phenolic housing with epoxy end and epoxy dip construction. Types for standard or high speed DC circuits or AC circuits.

## 8 Varistors, Modulators, Demodulators, Phase Comparators, Balanced Bridge and Ring Circuits

## 9 Special Designs

In addition to standard designs, many others are available with minimum time needed to meet your special requirements. Construction, circuit design and electrical characteristics can be modified for the most demanding applications. Edal is one of the largest producers of selenium and silicon rectifiers offering instant shipment of off-the-shelf items, plus having production geared for the short, custom run. You're assured of high performance rectifiers, with minimum delivery time and highly competitive prices.

**Edal Industries, Inc.**