

L60S SERIES

T-11-23

SURGEPAK™

Transient Voltage Suppressor • Surge Module

Voltage Range 8V4 to 500 Volts

Across the Line AC Power Protection

APPLICATIONS

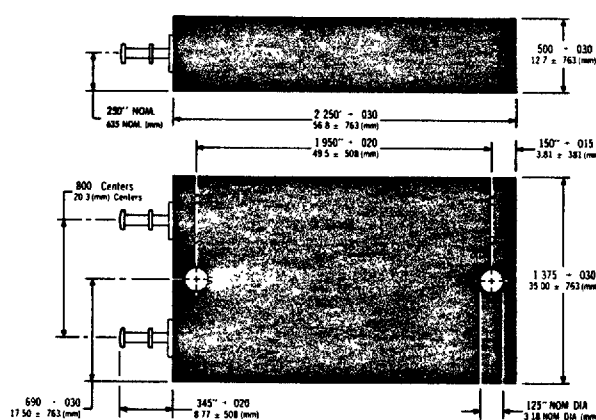
- PHP/PIP series is designed for applications requiring "across-the-line" AC power protection. These Surgepak™ modules are used in applications where extreme voltage transients can permanently damage voltage sensitive systems or components. These devices are most often used when discrete devices do not have high enough power requirements to suppress large power surges.

FEATURES

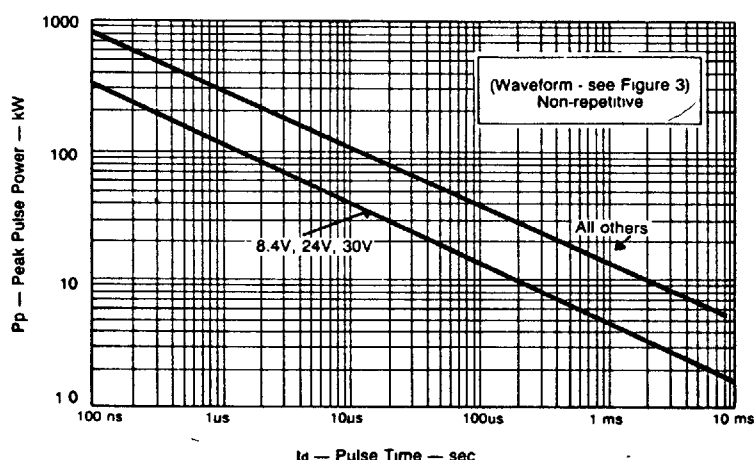
- Plastic moulded case
- 7.5, 15, 60 KWatt surge capability 40μs expo.
- Available for Military and Commercial applications
- Fast response time: typically less than 1.0 ps from 0 volts to BV min.
- T operating and storage -65°C to +150°C

MECHANICAL DATA

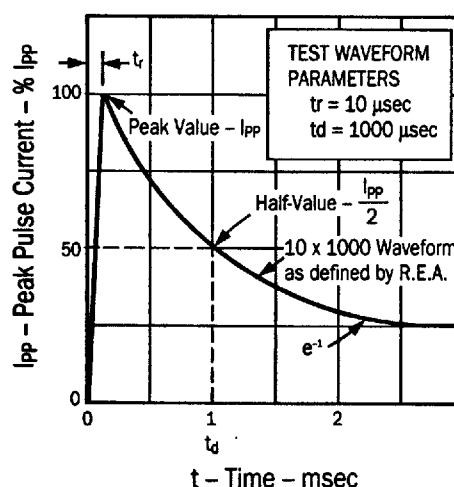
- Moulded case
- Weight: 50 grams
- Bipolar and Unipolar



PEAK PULSE POWER vs PULSE TIME



PULSE WAVEFORM





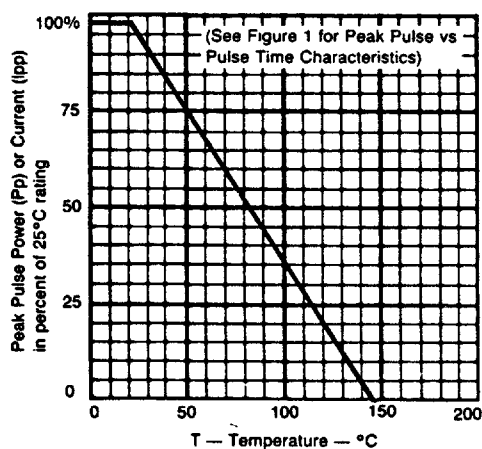
Electrical Characteristics @ 25°C

Semitron Part Number	Military Part Number	Average Rms Voltage Voltage Volts AC	Reverse Stand-off Voltage V_R Volts DC	Minimum Breakdown Voltage BV Volts	I_R mA	Maximum Reverse Leakage @ V_R (I_R) @ V_R Micro Amperes	Maximum Clamping Voltage @ I_{PP} V_C Volts DC	Maximum Peak Pulse Current I_{PP} A	Maximum Peak Pulse Power (1 msec) (P_P) Kilowatts
L60S 8.4M	PHP 8.4	8.4	12.0	14	10	250	22	341	7.5
L60S 24M	PHP 24	24.0	34.0	40	10	250	67	112	7.5
L60S 30M	PHP 30	30.0	42.5	50	1.0	250	84	90	7.5
L60S 60M	PHP 60	60.0	85.0	100	1.0	250	167	90	15.0
L60S 120M	PHP 120*	120.0	170.0	200	1.0	250	319	47	15.0
L60S 208M	PHP 208	208.0	295.0	347	1.0	250	536	28	15.0
L60S 250M	PHP 250*	250.0	354.0	418	1.0	250	652	23	15.0
L60S 440M	PHP 440	440.0	623.0	735	1.0	250	1138	13.2	15.0
L60S 500M	PHP 500*	500.0	708.0	835	1.0	250	1292	11.6	15.0
Commercial Part Number									
L60S 8.4	PIP 8.4	8.4	12.0	14	10	250	22	341	7.5
L60S 24	PIP 24	24.0	34.0	40	10	250	67	112	7.5
L60S 30	PIP 30	30.0	42.5	50	1.0	250	84	90	7.5
L60S 60	PIP 60	60.0	85.0	100	1.0	250	167	90	15.0
L60S 120	PIP 120*†	120.0	170.0	200	1.0	250	319	47	15.0
L60S 208	PIP 208	208.0	295.0	347	1.0	250	536	28	15.0
L60S 250	PIP 250*	250.0	354.0	418	1.0	250	652	23	15.0
L60S 440	PIP 440	440.0	623.0	735	1.0	250	1138	13.2	15.0
L60S 500	PIP 500*	500.0	708.0	835	1.0	250	1292	11.6	15.0

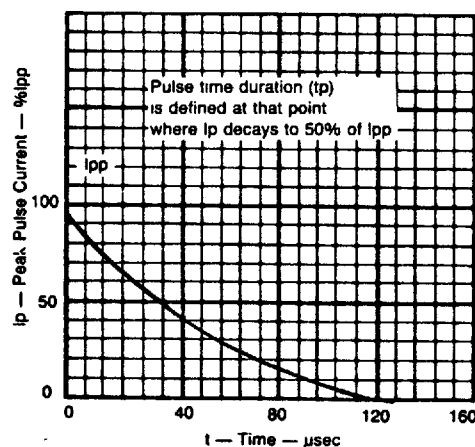
Semitron Part Number	Commercial Part Number	Reverse Stand-off Voltage V_R Volts	Breakdown Voltage @ 1 mA BV Volts Min. Max.	Maximum Reverse Leakage @ V_R I_R μ A	Maximum Clamping Voltage @ I_{PP} V_C Volts	Maximum Peak Pulse Current I_{PP} A
L60S 200C	60KS 200C*	180	200 225	10	335	180

*C Denotes Bidirectional

PULSE WAVEFORM



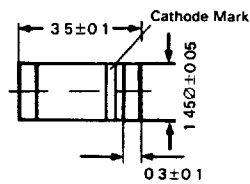
PULSE WAVEFORM (1.5 x 40 usec)



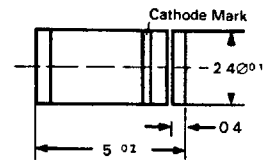
T-91-20

OUTLINE DRAWINGS

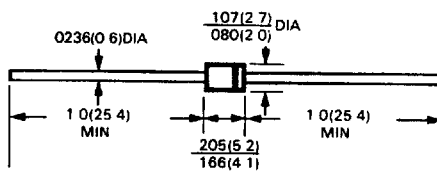
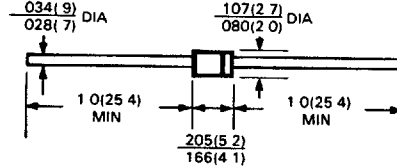
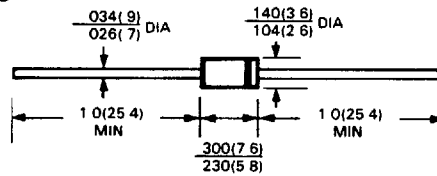
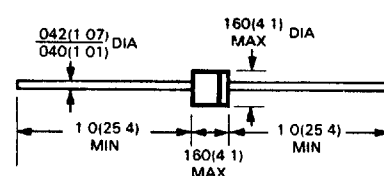
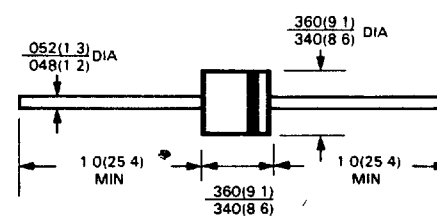
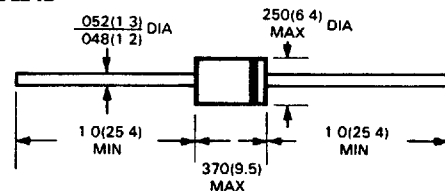
Unit = inch (mm)

DL-35
MiniMELF

UNIT=(mm)

DL-41
MELF

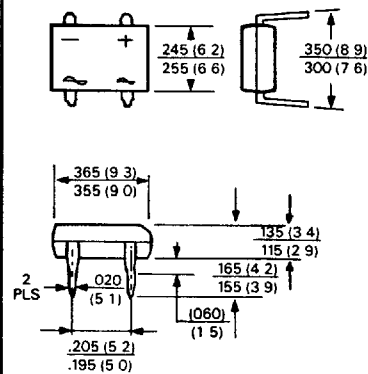
UNIT=(mm)

A-405**D0-41****D0-15****R-3****R-6****D0-201AD**

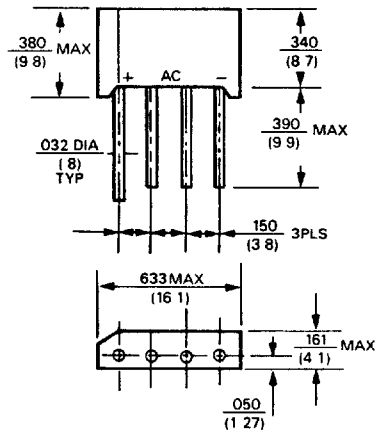
semitron™
semitron
semitron

OUTLINE DRAWINGS

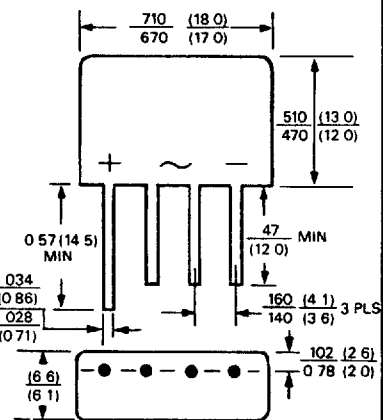
DB-1



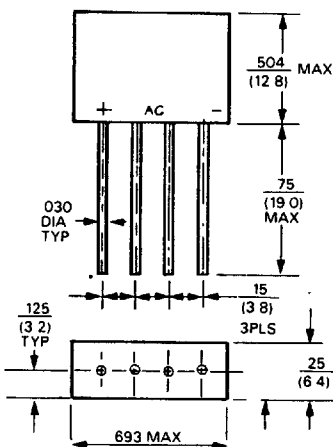
RS-1



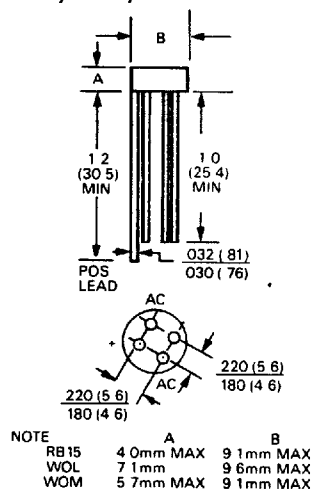
RS-2



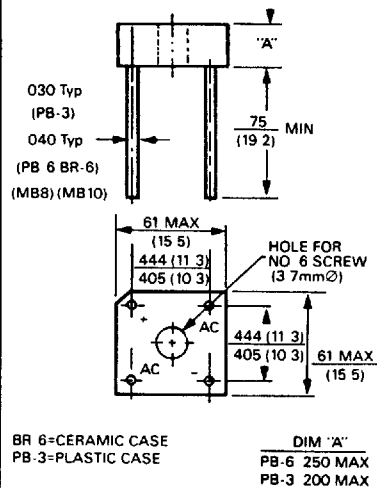
BR8D



RB-15/WOL/WOM



PB-3/BR-6/PB-6

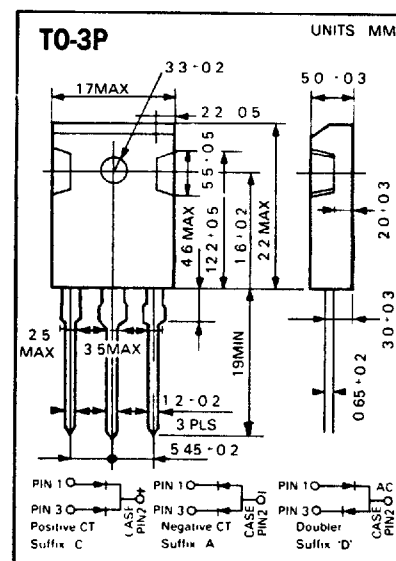
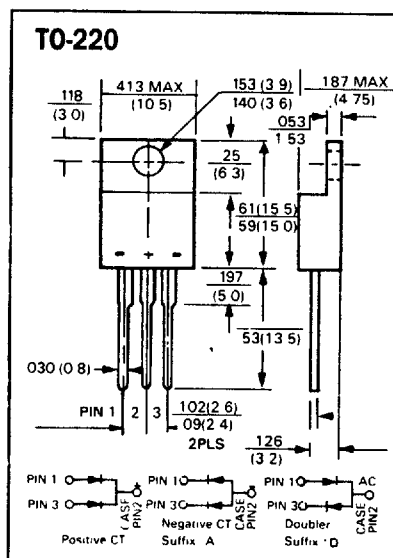
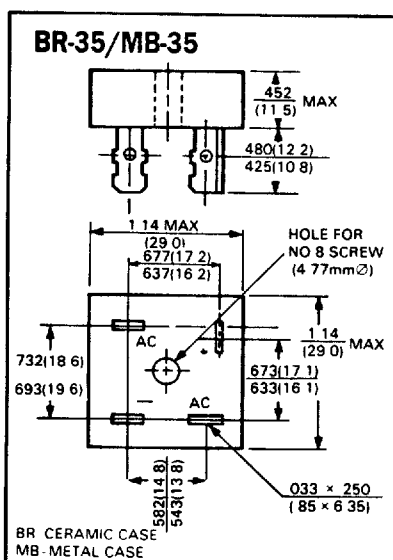
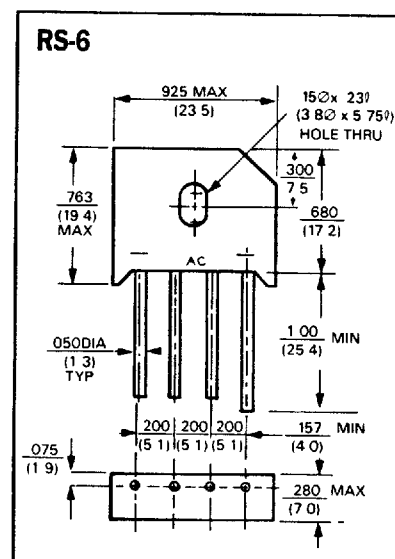
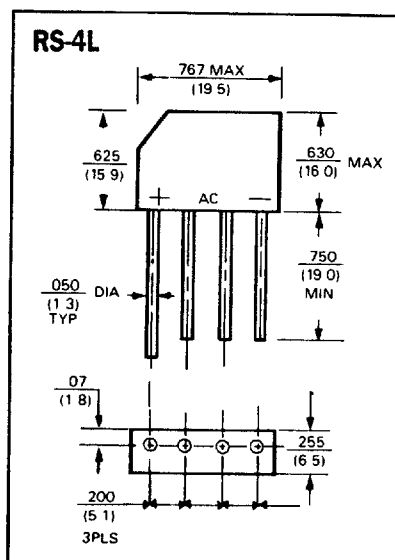
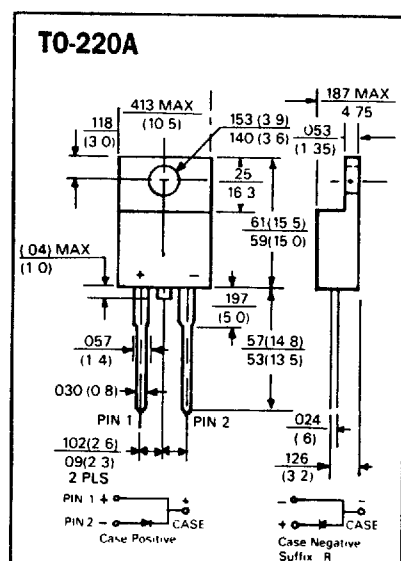


RECTIFIER DIODES AND
BRIDGE RECTIFIERS

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OUTLINE DRAWINGS



SEMITRON INDUSTRIES LTD

RECTIFIERS

Product Packaging Specifications

PACKAGING OF AXIAL LEAD DIODES, MELF AND MINI-MELF SURFACE MOUNT DEVICES AND TRANSISTORS

REEL PACK

OUTLINE	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA. (m/m)	QTY./REEL (each)
DO-7	5.0	52.4	330	10,000
DO-35	5.0	53	355	10,000
DO-35 (ZENER)	[RADIAL TAPING SEE FIG. 1, 2 & 3]		355	5,000
DL-35 (MINI MELF)	See Pg. 37		250/330	5,000/10,000
DL-41 (MELF)	See Pg. 37		330	5,000
A-405	5.0	52.4	330	5,000
A-500	5.0	52.4	203/254/304	1,000/2,000/3,000
DO-41	5.0	52.4	330	5,000
DO-41 (ZENER)	5.0	53	355	5,000
DO-15	5.0	52.4	330	4,000
R-3	5.0	52.4	330	3,000
DO-201AD	10.0	52.4	330	1,200
R-6	10.0	52.4	330	500
TO-92	[RADIAL TAPING SEE FIG. 4, 5 & 6]		355	2,000
TO-236/SOT-23	[SEE SPECIFICATIONS ON PG.38]		178	3,000

PACKAGING OF AXIAL LEAD DIODES AND LEADED TRANSISTORS

AMMO PACK

OUTLINE	COMPONENT SPACE (mm)	TAPE SPACE (mm)	BOX SIZE (m/m)	QTY./BOX (each)
DO-35 (SW. DIODES)	5.0	53	338/147/77	15,000
DO-35	5.0	53	255/95/85	6,000
DO-35	5.0	26	255/95/51	6,000
A-405	5.0	52.4	255/95/78	3,000
DO-41	5.0	52.4	255/95/78	3,000
DO-41	5.0	26	255/51/95	3,000
DO-41 (ZENER)	5.0	53	255/95/85	3,000
DO-41 (ZENER)	5.0	26	255/95/51	3,000
DO-15	5.0	52.4	255/95/78	2,200
R-3	5.0	52.4	255/95/78	2,000
DO-201AD	10.0	52.4	255/95/78	800
R-6	10.0	52.4	255/95/78	300
TO-92	[RADIAL TAPING, SEE FIG. 4]		340/340/45	4,000

RECTIFIER DIODES AND
BRIDGE RECTIFIERS

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