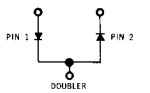
VARO

VARO SEMICONDUCTOR, INC.

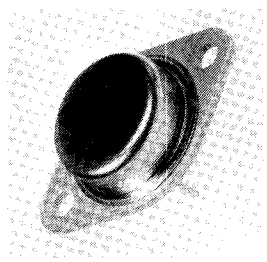
P.O. BOX 676, 1000 N. SHILOH, GARLAND, TEX. 75040 (214) 272-4551 TWX 910-860-5178

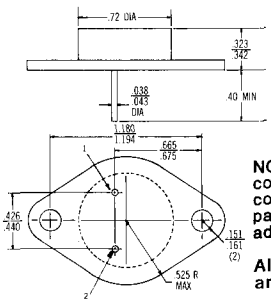
30AMP CENTER TAPPED SILICON INTEGRATED RECTIFIER



TO-3 CASE

- **Controlled Avalanche series: 250V, 450V & 650V min. avalanche ratings (V_{BR})**
- **Non-controlled avalanche series: 100V, 200V, 400V, 600V (V_{RRM})**
- **250 Amp peak one-half cycle surge current**
- **Fast recovery series: 200 nanosec, recovery time (t_{rr})**





NOTE: Standard device is common cathode. To order common anode add "/A" to part no. To order doubler add "/E" to part no.

All JEDEC TO-3 dimensions and notes are applicable.

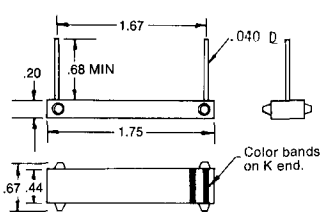
SPECIFICATIONS AT $T_A = 25°C$ (UNLESS OTHERWISE SPECIFIED)

Varo Part Number	Peak Rep. Reverse Voltage (V_{RRM}) (Volts)	Avalanche Voltage (V_{BR}) (Min. Volts)	(Max. Volts)	Peak Surge Current ½ cycle @ 60 Hz (I_{FSM}) (Amps/Leg)	DC Fwd. Current @ $I_C = 100°$ (I_O) (Amps/Leg)	Junction Oper. & Stg. Temp. Range (T_J, T_{STG}) (°C)	Max. Inst. Fwd. Voltage Drop @ I_O (V_{FM}) (Volts/Leg)	Max. Reverse Current @ Rated V_{RRM} & $T_C = 100°C$ (I_{RM}) (mA/Leg)	Pricing 1-99	100-999
CONTROLLED AVALANCHE										
R702	200	250	700	250	15	−65 to +150	1.2	1.0	**$2.05**	**$1.71**
R704	400	450	900	250	15	−65 to +150	1.2	1.0	**2.25**	**1.88**
R706	600	650	1100	250	15	−65 to +150	1.2	1.0	**2.70**	**2.25**
NON-CONTROLLED AVALANCHE										
R711	100	NA		250	15	−65 to +150	1.2	1.0	**1.72**	**1.44**
R712	200			250	15	−65 to +150	1.2	1.0	**1.80**	**1.50**
R714	400			250	15	−65 to +150	1.2	1.0	**1.98**	**1.65**
R716	600			250	15	−65 to +150	1.2	1.0	**2.37**	**1.98**
FAST RECOVERY										
R711X	100	NA		150	15	−65 to +150	1.4	5.0	**2.60**	**1.96**
R712X	200			150	15	−65 to +150	1.4	5.0	**3.07**	**2.32**
R714X	400			150	15	−65 to +150	1.4	5.0	**3.69**	**2.79**
R716X	600			150	15	−65 to +150	1.4	5.0	**4.61**	**3.48**

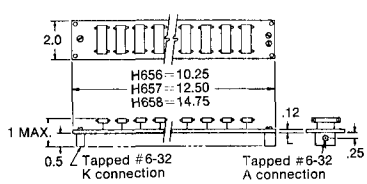
Write for Data Sheet DLS-048

HIGH VOLTAGE RECTIFIER ASSEMBLIES FOR POLLUTION CONTROL EQUIPMENT

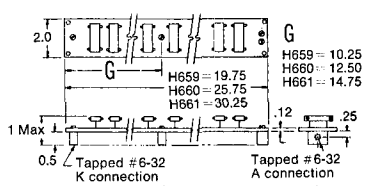
(PICTURED ABOVE H656 ASSEMBLY)



SERIES H655 SUBASSEMBLY



SERIES H656, H657, H658 ASSEMBLIES



SERIES H659, H660, H661 ASSEMBLIES (CENTER TAPPED)

VARO PART NO.*	PRV (Oper.) (1)	PRV (Test)	Peak Surge Current, ½ Cycle @ 60 Hz (Non-rep.)	Peak Surge Current, 10 Cycles at 60 Hz	DC Fwd. Current in 50°C 011 (1)	Avalanche Energy, 100 μsec. pulse width	Max. Inst. Fwd. Voltage Drop @ $I_F = 2A$	Max. Rev. Current @ V_R (Test)	No. Diodes per board
SYMBOL	$V_{R(oper.)}$	$V_{R(test)}$	I_{FSM}	I_{FRM}	I_O		V_{FM}	I_{RM}	
UNITS	KV	KV	Amps	Amps	Amps	Joules	Volts	μAmps	
H655	8.3	10	50	15	2	0.42	15	1	
H656	100	120	50	15	2	5.	170	1	12
H657	125	150	50	15	2	6.3	220	1	15
H658	150	180	50	15	2	7.5	260	1	18
H659	200	240	50	15	2	10.0	340	1	24
H660	250	300	50	15	2	12.6	440	1	30
H661	300	360	50	15	2	15.0	520	1	36

Note 1: To Achieve Rated Current and Voltage, Diodes must be submerged in Shell Diala Oil AX Electrical Insulating Oil or Equivalent.

***PRICES ON REQUEST**