

RECTIFIER ASSEMBLIES

Single Phase Bridges, High Voltage
0.125-0.6 Amp, Standard and Fast Recovery

673, 676 SERIES
(1200-5000V)

FEATURES

- Miniature High Voltage Bridges
- Continuous Ratings: to 0.6A
- Surge Ratings: to 15A
- PIV's: from 1200 to 5000V
- Recovery Times: to 500ns
- Controlled Avalanche Characteristics
- Only Fused in Glass Diodes Used

DESCRIPTION

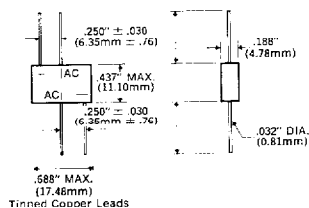
These miniature molded high-voltage single phase bridges are designed for universal application in power supplies. The miniature package is shatterproof and is capable of handling extremes in temperature, vibration and shock. These bridges, therefore are ideally suited for miniaturized, tightly packaged equipment operating in extreme environments.

ABSOLUTE MAXIMUM RATINGS

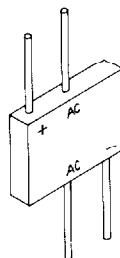
Peak Inverse Voltage 1200 to 5000V
Maximum Average D.C. Output Current See Electrical Specifications
Non-repetitive Sinusoidal Surge (8.3ms) See Electrical Specifications
Operating and Storage Temperature Range -65°C to +150°C
Thermal Resistance Junction-to-Ambient 50°C/W

MECHANICAL SPECIFICATIONS

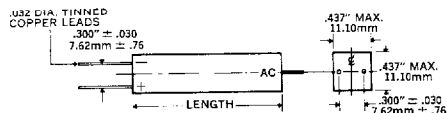
673-7



Body H



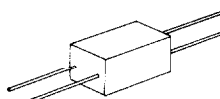
673, 676 SERIES



MAX. LENGTHS

J	K	L	M	N	O	P
.562"	.688"	.875"	1.125"	1.25"	1.375"	1.625"
14.27mm	17.48mm	22.23mm	28.58mm	31.75mm	34.92mm	41.28mm

BODY J through P



MARKING

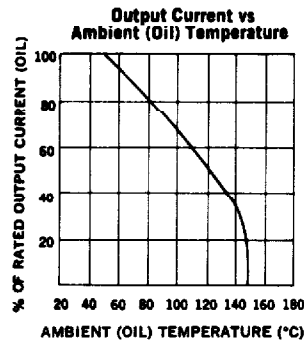
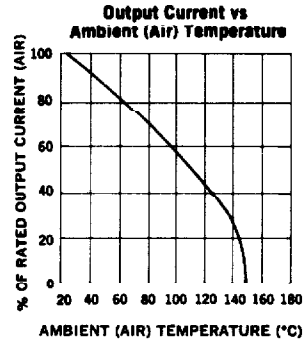
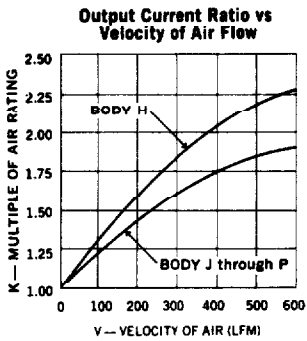
Alternating Current Input	A.C.
Cathode — Positive Output	+
Anode — Negative Output	—

Part number is printed on the body.

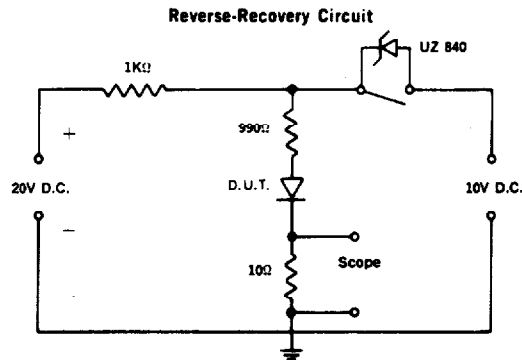
Microsemi Corp.
Watertown
The diode experts

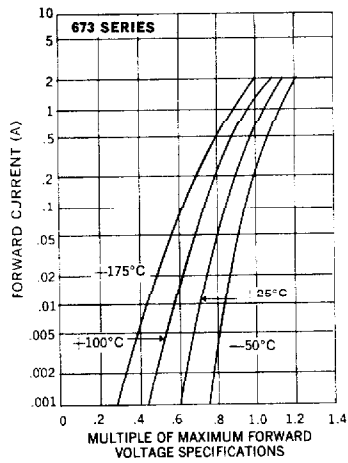
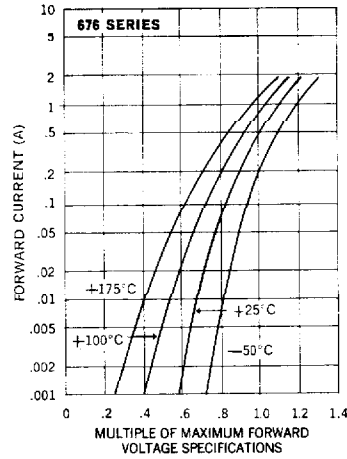
Type		Electrical Specifications at 25°C					Maximum Ratings			
		PIV Per Leg	Maximum Forward Voltage Drop Per Leg	Leakage Current Per Leg @ PIV		Maximum Reverse Recovery Time*	Body Size	Maximum Average D.C. Output Current		Non-repetitive Sinusoidal Surge (8.3ms)
				T _A = 25°C				T _A = 50°C		
				μA	μA			ns		
Standard Recovery	673-7	1200	2.2V @ 0.4A	2	100		H	0.6	1.5	15
	673-75	1800	3.3V @ 0.4A					0.5	1.25	
	673-8	2400	4.4V @ 0.4A					0.4	1.0	
	673-85	3000	5.5V @ 0.3A					0.3	0.75	
	673-9	3600	6.6V @ 0.2A					0.2	0.5	
	673-10	4200	7.7V @ 0.2A					0.18	0.45	
	673-11	4800	8.8V @ 0.15A					0.16	0.4	
	673-12	5000	9.0V @ 0.15A				O	0.16	0.4	
Fast Recovery	676-12	1200	3.3V @ 0.3A	5	150	500	J	0.4	1.0	10
	676-18	1800	4.4V @ 0.2A					0.35	0.85	
	676-24	2400	5.5V @ 0.2A					0.325	0.8	
	676-30	3000	7.7V @ 0.2A					0.25	0.625	
	676-36	3600	8.8V @ 0.15A					0.175	0.425	
	676-42	4200	9.9V @ 0.15A					0.15	0.375	
	676-48	4800	11V @ 0.15A					0.135	0.325	
	676-50	5000	11V @ 0.15A					0.125	0.3	

*Measured in a reverse recovery circuit switching from 10mA forward to 10mA reverse current recovering to 5mA.



Application example: The rectifier is to be used in a cabinet at 60°C with ambient air moving at 400 LFM. The rating is reduced (Fig. 2) by a factor of 0.81 due to the elevated temperature, but is enhanced by 2.X (Fig. 1) due to the air flow. Hence the DC output current is 0.81 x 2, or 1.6 times the 25°C air rating.



Typical Forward Voltage vs
Forward CurrentTypical Forward Voltage vs
Forward Current

Typical Leakage Current vs. Voltage

