

Table 27. Rectifier Applications

Typical Circuit	Total Supply Power	Input Rectifiers Standard Recovery for Line Voltage Operation		
		Input Current	Suggested Devices*	
			Type	I_O V_R^*
BASIC FLYBACK CONFIGURATION $P_O \approx I_{C(OP)} V_{in}/6$ • NO FILTER INDUCTANCE • LOW POWER MULTIPLE OUTPUT SYSTEMS • REFERENCE EB-87 Total Supply Power — 10, 50, 75 W Input Current — < 1A to 2A	10 W	<1 A	1N4004	1 A 400 V
	50 W	1 A	1N4004	1 A 400 V
	75 W	2 A	MR504 1N5404	3 A 400 V 3 A 400 V
BASIC FORWARD CONVERTER $P_O \approx I_{C(OP)} V_{in}/3$ • HIGHER OUTPUT POWER THAN FLYBACK • LOWER OUTPUT RIPPLE THAN FLYBACK Total Supply Power — 75, 100 W Input Current — 2A to 3A	75 W	2 A	MR504 1N5404	3 A 400 V 3 A 400 V
	100 W	3 A	MR504 1N5404	3 A 400 V 3 A 400 V
BASIC HALF-BRIDGE CONFIGURATION $P_O \approx I_{C(OP)} V_{in}/3$ • NO SYMMETRY CORRECTION NEEDED • BEST TRANSFORMER UTILIZATION • HIGH FREQUENCY RIPPLE • REFERENCE AN-767 EB-78 AND EB-86 Total Power Supply — 250, 100, 2500 W Input Current — 6A to 25A	250 W	6 A	MR754 1N1204, A, B, C MR1124	6 A 400 V 12 A 400 V 12 A 400 V
	1000 W	12 A	1N1204, A, B, C MR1124 MDA2504 MR2004S	12 A 400 V 12 A 400 V 25 A 400 V 20 A 400 V
	2500 W	25 A	MDA2504 MDA3504 1N1183, A	25 A 400 V 35 A 400 V 40 A 400 V