

Series B427, BA223, B587, B588

Sub-Miniature High Voltage Silicon Rectifiers

Compact tubular construction and flexible leads facilitate circuit mounting, provide excellent thermal conductivity and eliminate sharp edges to reduce corona common to larger, rectangular packages. Diodes are manufactured using double diffused junctions which are bonded and selected for uniform electrical characteristics.

Series B427, BA223, B587 and B588 units all meet moisture resistance requirements of MIL Standard-202A, Method 106. Series B427 and BA223 are available in voltage ratings of 1000 to 7000 volts PIV. The B427 is available in a current range from 50ma to 200ma and the BA223 in a current range from 150ma to 1000ma. Both are available

in standard and fast recovery series. Series B587 and B588 offer voltage ratings from 1000 to 20,000 volts PIV. The B587 has a current rating from 50ma to 200ma and the B588, from 100ma to 1000ma. Both are available in standard and fast recovery series. All series are available with special ratings on request.

Specifications

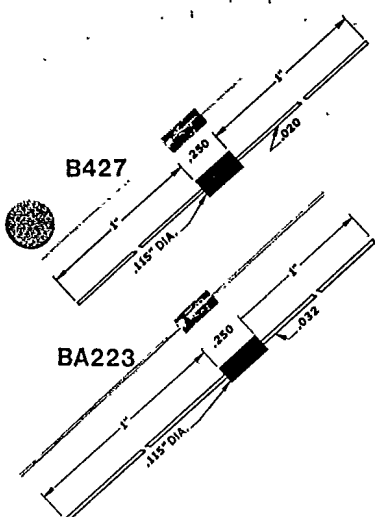
B427, BA223

Standard Series

PIV VOLTS	PART NO.*	I_o		V_r		
		ma @ 55°C	l _o @ 25°C	ma @ 55°C	l _o @ 25°C	
1000	B427-10	200	5	BA223-10	1000	5
1500	B427-15	200	5	BA223-15	1000	5
2000	B427-20	200	5	BA223-20	700	5
2500	B427-25	200	5	BA223-25	700	5
3000	B427-30	200	5	BA223-30	500	5
3500	B427-35	100	7	BA223-35	500	7
4000	B427-40	100	7	BA223-40	400	7
4500	B427-45	100	7	BA223-45	400	7
5000	B427-50	100	7	BA223-50	300	7
5500	B427-55	50	10	BA223-55	300	10
6000	B427-60	50	10	BA223-60	200	10
6500	B427-65	50	10	BA223-65	200	10
7000	B427-70	50	10	BA223-70	150	10

Fast Recovery Series

PIV VOLTS	PART NO.*	I_o		V_r		
		ma @ 40°C	l _o @ 25°C	ma @ 40°C	l _o @ 25°C	
1000	BR427-10	100	7	BAR223-10	500	7
1500	BR427-15	100	7	BAR223-15	500	7
2000	BR427-20	100	7	BAR223-20	350	7
2500	BR427-25	100	7	BAR223-25	350	7
3000	BR427-30	100	7	BAR223-30	250	7
3500	BR427-35	50	10	BAR223-35	250	10
4000	BR427-40	50	10	BAR223-40	200	10
4500	BR427-45	50	10	BAR223-45	200	10
5000	BR427-50	50	10	BAR223-50	150	10
5500	BR427-55	25	15	BAR223-55	150	15
6000	BR427-60	25	15	BAR223-60	100	15
6500	BR427-65	25	15	BAR223-65	100	15
7000	BR427-70	25	15	BAR223-70	75	15



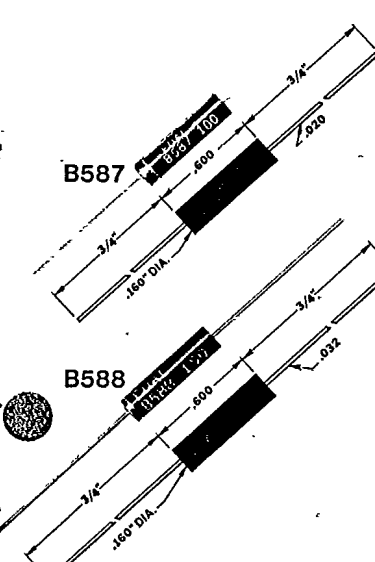
B587 and B588

Standard Series

PIV VOLTS	PART NO.*	I_o		V_r		
		ma @ 55°C	l _o @ 25°C	ma @ 55°C	l _o @ 25°C	
1000	B587-10	200	5	B588-10	1000	5
1500	B587-15	200	5	B588-15	1000	5
2000	B587-20	200	5	B588-20	700	5
2500	B587-25	200	5	B588-25	700	5
3000	B587-30	200	5	B588-30	500	5
3500	B587-35	100	7	B588-35	500	7
4000	B587-40	100	7	B588-40	400	7
4500	B587-45	100	7	B588-45	400	7
5000	B587-50	100	7	B588-50	300	7
5500	B587-55	50	10	B588-55	300	10
6000	B587-60	50	10	B588-60	200	10
6500	B587-65	50	10	B588-65	200	10
7000	B587-70	50	10	B588-70	150	10
8000	B587-80	50	12	B588-80	125	12
8500	B587-85	50	12	B588-85	125	12
9000	B587-90	50	12	B588-90	125	12
9500	B587-95	50	12	B588-95	125	12
10000	B587-100	50	15	B588-100	100	15
11000	B587-110	50	15	B588-110	100	15
12000	B587-120	50	15	B588-120	100	15
13000	B587-130	50	15	B588-130	100	15
14000	B587-140	50	15	B588-140	100	15
15000	B587-150	50	25	B588-150	100	25
16000	B587-160	50	25	B588-160	100	25
17000	B587-170	50	25	B588-170	100	25
18000	B587-180	50	25	B588-180	100	25
19000	B587-190	50	25	B588-190	100	25
20000	B587-200	50	30	B588-200	100	30

Fast Recovery Series

PIV VOLTS	PART NO.*	I_o		V_r		
		ma @ 40°C	l _o @ 25°C	ma @ 55°C	l _o @ 25°C	
1000	BR587-10	100	7	BR588-10	500	7
1500	BR587-15	100	7	BR588-15	500	7
2000	BR587-20	100	7	BR588-20	350	7
2500	BR587-25	100	7	BR588-25	350	7
3000	BR587-30	100	7	BR588-30	250	7
3500	BR587-35	50	10	BR588-35	250	10
4000	BR587-40	50	10	BR588-40	200	10
4500	BR587-45	50	10	BR588-45	200	10
5000	BR587-50	50	10	BR588-50	150	10
5500	BR587-55	25	15	BR588-55	150	15
6000	BR587-60	25	15	BR588-60	100	15
6500	BR587-65	25	15	BR588-65	100	15
7000	BR587-70	25	15	BR588-70	75	15
8000	BR587-80	25	18	BR588-80	65	18
8500	BR587-85	25	18	BR588-85	65	18
9000	BR587-90	25	18	BR588-90	60	18
9500	BR587-95	25	18	BR588-95	55	18
10000	BR587-100	25	23	BR588-100	50	23
11000	BR587-110	25	23	BR588-110	50	23
12000	BR587-120	25	23	BR588-120	50	23
13000	BR587-130	25	23	BR588-130	50	23
14000	BR587-140	25	23	BR588-140	50	23
15000	BR587-150	25	38	BR588-150	50	38
16000	BR587-160	25	38	BR588-160	50	38
17000	BR587-170	25	38	BR588-170	50	38
18000	BR587-180	25	38	BR588-180	50	38
19000	BR587-190	25	38	BR588-190	50	38
20000	BR587-200	25	45	BR588-200	50	45



* Standard product lines are also available in higher current ratings. Other values available upon request.

Electrical Ratings

	B427	BR427	BA223	BAR223	B587	BR587	B588	BR588
Maximum Allowable One Cycle Surge Current: (60 Hz single phase non-recurrent, at rated PIV and no load)	4 amps	4 amps	25 amps	25 amps	4 amps	4 amps	25 amps	25 amps
Maximum Reverse Current @ PIV 25°C 100°C	1µa 40µa	2µa 100µa	5µa 200µa	10µa 500µa	1µa 40µa	2µa 100µa	5µa 200µa	10µa 500µa
Recovery Time I _r 2ma and I _f 4ma recovery to 1ma	—	250 ns	—	—	—	250 ns	—	—
Recovery Time I _r 20ma and I _f 40ma recovery to 10ma	—	—	—	200 ns	—	—	—	200 ns

