



**POWER RECTIFIER-BRIDGE-AND HIGH VOLTAGE ZENER**



**SILICON RECTIFIERS**

For Glass Passivated add "G" to Part No.

PRV PART NO. Io(A)	50	100	200	400	600	800	1000	OUTLINE
1.0	1N4001/G	1N4002/G	1N4003/G	1N4004/G	1N4005/G	1N4006/G	1N4007/G	DO-41
1.5	1N5391/G	1N5392/G	1N5393/G	1N5395/G	1N5397/G	1N5398/G	1N5399/G	DO-15
2.0	2A01	2A02	2A03	2A04	2A05	2A06	2A07	DO-15
2.5	TR251	TR252	TR253	TR254	TR255	TR256	TR257	R-3
3.0	1N5400/G	1N5401/G	1N5402/G	1N5404/G	1N5406/G	1N5407/G	1N5408/G	DO-27
6.0	6A05/G	6A10/G	6A20/G	6A40/G	6A60/G	6A80/G	6A100/G	R-6

**FAST RECOVERY RECTIFIERS**

Trr: 150ns max. (PRV < 400V), 250ns max. (PRV = 600V), 500ns max. (PRV > 800V)

1.0	FR101/G	FR102/G	FR103/G	FR104/G	FR105/G	FR106/G	FR107/G	DO-41
1.5	FR151/G	FR152/G	FR153/G	FR154/G	FR155/G	FR156/G	FR157/G	DO-15
2.0	FR201	FR202	FR203	FR204	FR205	FR206	FR207	DO-15
2.5	FR251	FR252	FR253	FR254	FR255	FR256	FR257	R-3
3.0	FR301/G	FR302/G	FR303/G	FR304/G	FR305/G	FR306/G	FR307/G	DO-27
6.0	FR601/G	FR602/G	FR603/G	FR604/G	FR605/G	FR606/G	FR607/G	R-6

**BRIDGE RECTIFIERS**

1.5	W005/G	W01/G	W02/G	W04/G	W06/G	W08/G	W10/G	RB-15
3.0	SB305/G	SB310/G	SB320/G	SB340/G	SB360/G	SB380/G	SB3100/G	SB-3
4.0	SB401	SB402	SB403	SB404	SB405	SB406	SB407	SB-4
6.0	SB601/G	SB602/G	SB603/G	SB604/G	SB605/G	SB606/G	SB607/G	SB-6
8.0	SB801	SB802	SB803	SB804	SB805	SB806	SB807	SB-8
10	SB101	SB102	SB103	SB104	SB105	SB106	SB107	SB-10
15	SB1505/W	SB151/W	SB152/W	SB154/W	SB156/W	SB158/W	SB1510/W	SB-15/W
25	SB2505/W	SB251/W	SB252/W	SB254/W	SB256/W	SB258/W	SB2510/W	SB-25/W
35	SB3505/W	SB351/W	SB352/W	SB354/W	SB356/W	SB358/W	SB3510/W	SB-35/W

**SCHOTTKY BARRIER RECTIFIERS**

PRV PART NO. Io(A)	20/25	30/35	40/45	50	60	80	OUTLINE
1.0	1N5817	1N5818	1N5819	—	—	—	DO-41
1.0	SR102	SR103	SR104	SR105	SR106	SR108	DO-41
3.0	IN5820	IN5821	IN5822	—	—	—	DO-27
3.0	SR302	SR303	SR304	SR305	SR306	SR308	DO-27
5.0	SR502	SR503	SR504	SR505	SR506	SR508	DO-27
8.0	SR820	SR830	SR840	SR850	SR860	—	TO-220A
16	SR1620	SR1630	SR1640	SR1650	SR1660	—	TO-220

**SUPER FAST RECTIFIERS**

Trr: 35ns max.

PRV PART NO. Io(A)	50	100	150	200	OUTLINE
1.0	SF11	SF12	SF13	SF14	DO-41
2.0	SF21	SF22	SF23	SF24	DO-15
3.0	SF31	SF32	SF33	SF34	DO-27
6.0	SF61	SF62	SF63	SF64	DO-27
8.0	SF81	SF82	SF83	SF84	TO-220A
16	SF1601	SF1602	SF1603	SF1604	TO-220

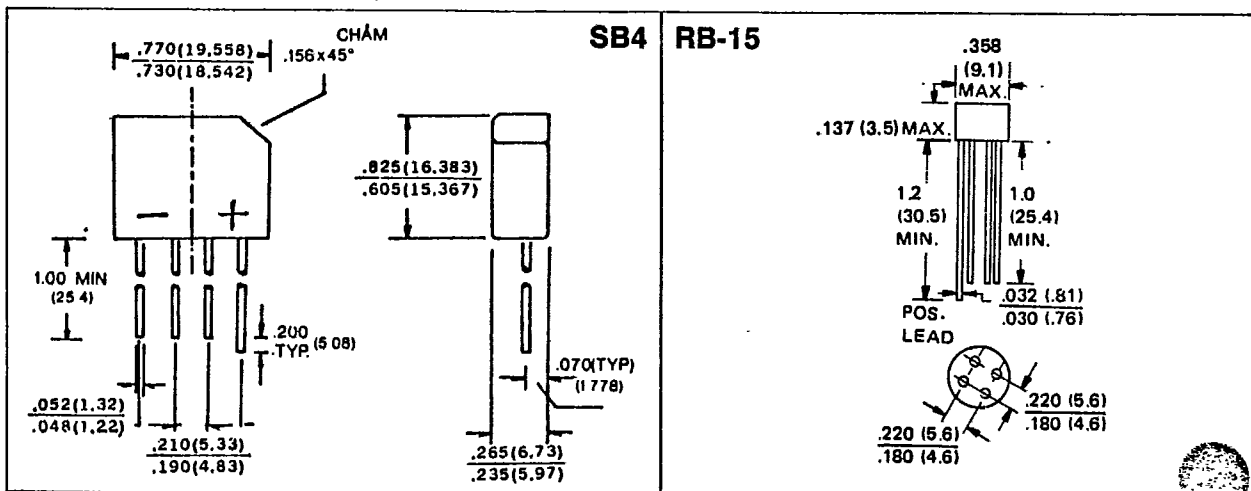
PRV PART NO. Io(A)	50	100	200	300	400	OUTLINE
1.0	HER101	HER102	HER103	HER104	HER105	DO-41
1.5	HER151	HER152	HER153	HER154	HER155	DO-15
3.0	HER301	HER302	HER303	HER304	HER305	DO-27
6.0	HER601	HER602	HER603	HER604	HER605	R-6
8.0	HER801	HER802	HER803	HER804	—	TO-220A
16	HER1601	HER1602	HER1603	HER1604	—	TO-220

1 WATT HIGH VOLTAGE ZENER REGULATOR DIODES, DO-41 PACKAGE

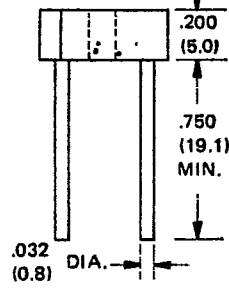
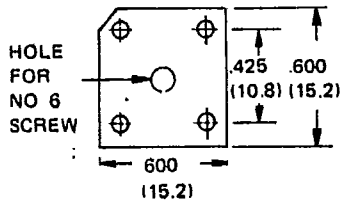
PART NO.	NORMAL ZENER VOLTAGE @ IZT	DYNAMIC IMPEDANCE				MAXIMUM REVERSE CURRENT		MAX. FORWARD VOLTAGE
	Vz (V)	IZT (mA)	ZZT (OHMS)	IZK (mA)	ZZK (OHMS)	VR (V)	IR (μA)	VF (V) @ IF = 1A
Z100	100	5	600	.25	5000	75	0.5	1.0
Z100	110	5	750	.25	5000	80	0.5	1.0
Z115	115	5	750	.25	5000	85	0.5	1.0
Z120	120	5	850	.25	5000	90	0.5	1.0
Z130	130	5	1000	.25	5000	95	0.5	1.0
Z135	135	5	1100	.25	5000	100	0.5	1.0
Z140	140	5	1200	.25	5000	105	0.5	1.0
Z150	150	5	1300	.25	5000	110	0.5	1.0
Z160	160	5	1500	.25	5000	120	0.5	1.0
Z170	170	5	2200	.25	5000	130	0.5	1.0
Z180	180	5	2200	.25	5000	140	0.5	1.0
Z190	190	5	2500	.25	5000	150	0.5	1.0
Z200	200	5	2500	.25	5000	160	0.5	1.0
Z300	300	5	5000	.25	9000	260	0.5	1.0
Z330	330	5	5000	.25	9500	280	0.5	1.0

NOTE: Standard ±20%, Suffix "A" ±10%, Suffix "B" ±5%.

AXIAL LEAD	PACKAGE	L(Max)	D(Max)	H(Min)	d(Max)
	D0-15	.300	.140	1.0	.034
	D0-27	.370	.250	1.0	.052
	D0-41	.205	.107	1.0	.034
	R-3	.160	.160	1.0	.042
	R-6	.360	.280	1.0	.052



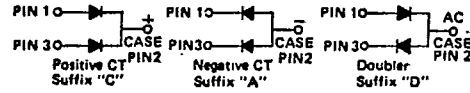
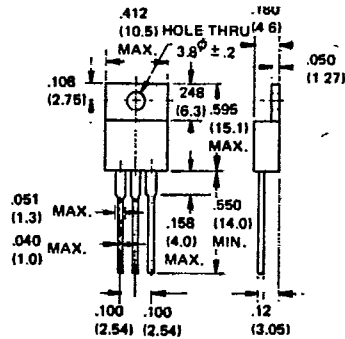
**SB-3**



**TO-220**

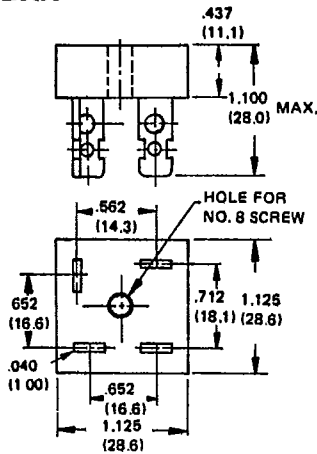
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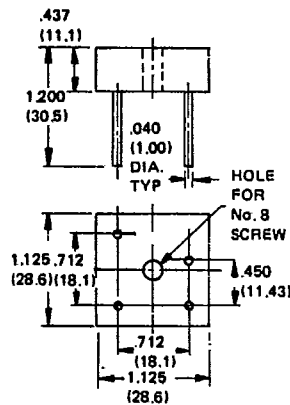


PACKAGE	d	i	REMARK
SB-3	.032	3A	AS PICTURE
SB-6	.040	6A	
SB-8, SB-10	.040	8A/10A	SQUARE

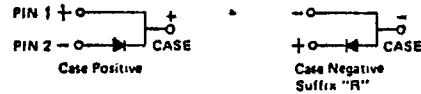
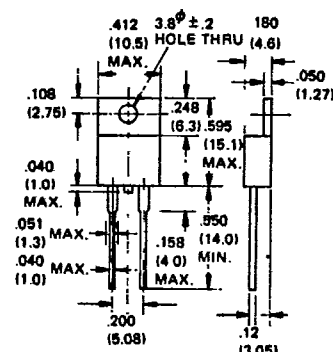
**SBXX**



**SBXXW**



**TO-220A**



**SILICON ZENER AND SWITCHING DIODES**

**400mW ZENER DIODE**

GLASS SEALED PLANAR DIODE, DOUBLE HEAT SINK, DO-35 PACKAGE

t=40msec

t=40msec

Device Type	Nom (V <sub>Z</sub> ) V	(I <sub>ZT</sub> ) mA	Max Zener Impedance Z <sub>ZT</sub> @I <sub>ZT</sub> Ohms	Max DC Zener Current (I <sub>ZM</sub> ) mA
1N746A	3.3	20	28	115
1N747A	3.6	20	24	105
1N748A	3.9	20	23	95
1N749A	4.3	20	22	90
1N750A	4.7	20	19	85
1N751A	5.1	20	17	75
1N752A	5.6	20	11	70
1N753A	6.2	20	7	64
1N754A	6.8	20	5	56
1N755A	7.5	20	6	51
1N756A	8.2	20	8	46
1N757A	9.1	20	10	42
1N758A	10.0	20	17	38
1N759A	12.0	20	30	31

Device Type	Nom (V <sub>Z</sub> ) V	(I <sub>ZT</sub> ) mA	Max Zener Impedance Z <sub>ZT</sub> @I <sub>ZT</sub> Ohms	Max DC Zener Current (I <sub>ZM</sub> ) mA
1N957B	6.8	18.5	4.5	47
1N958B	7.5	16.5	4.5	42
1N959B	8.2	15	6.5	38
1N960B	9.1	14	7.5	35
1N961B	10	12.5	8.5	32
1N962B	11	11.5	9.5	28
1N963B	12	10.5	11.5	26
1N964B	13	9.5	13	24
1N965B	15	8.5	16	21
1N966B	16	7.8	17	19
1N967B	18	7.0	21	17
1N968B	20	6.2	25	15
1N969B	22	5.6	29	14
1N970B	24	5.2	33	13
1N971B	27	4.6	41	11
1N972B	30	4.2	49	10
1N973B	33	3.8	58	9.2
1N974B	36	3.4	70	11

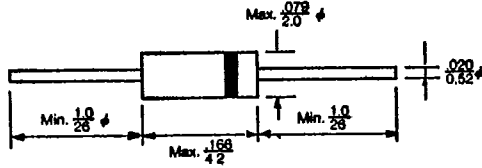
Tolerance: suffix A = V<sub>Z</sub> ±5%

TA=25°C Junction Temperature 175°C

Storage Temperature -65°C ~ +175°C

Tolerance: suffix B = V<sub>Z</sub> ±5%

DO-35



**Features**

- Silicon Planar Diode Double Heat Sink
- Storage Temperature  $-65^{\circ}\text{C} \sim +175^{\circ}\text{C}$
- Junction Temperature  $\sim 175^{\circ}\text{C}$
- DO-35 Package

**1N52 SERIES**

$t = 40\text{msec}$

Device Type	Nominal Zener Voltage $V_z$ at $I_z$	Test Current $I_z$	Maximum Zener Impedance $Z_{ZT}$ at $Z_T$	Typical Temperature coefficient	Maximum Reverse Leakage Current		Suffix B	Maximum Regulator current $I_{ZM}$
					In	Test-Voltage Suffix A		
	Volts	mA	Ohms	%/°C	$\mu\text{A}$	Volts	Volts	mA
1N5221B	2.4	20	30	-0.085	100	0.95	1.0	191
1N5222B	2.5	20	30	-0.085	100	0.95	1.0	182
1N5223B	2.7	20	30	-0.080	75	0.95	1.0	168
1N5224B	2.8	20	30	-0.080	75	0.95	1.0	162
1N5225B	3.0	20	29	-0.075	50	0.95	1.0	151
1N5226B	3.3	20	28	-0.070	25	0.95	1.0	138
1N5227B	3.6	20	24	-0.065	15	0.95	1.0	126
1N5228B	3.9	20	23	-0.060	10	0.95	1.0	115
1N5229B	4.3	20	22	$\pm 0.055$	5	0.95	1.0	106
1N5230B	4.7	20	19	$\pm 0.030$	5	1.9	2.0	97
1N5231B	5.1	20	17	$\pm 0.030$	5	1.9	2.0	89
1N5232B	5.6	20	11	+0.038	5	2.9	3.0	81
1N5233B	6.0	20	7	+0.038	5	3.3	3.5	76
1N5234B	6.2	20	7	+0.045	5	3.8	4.0	73
1N5235B	6.8	20	5	+0.050	3	4.8	5.0	67
1N5236B	7.5	20	6	+0.058	3	5.7	6.0	61
1N5237B	8.2	20	8	+0.062	3	6.2	6.5	55
1N5238B	8.7	20	8	+0.065	3	6.2	6.5	52
1N5239B	9.1	20	10	+0.068	3	6.7	7.0	50
1N5240B	10	20	17	+0.075	3	7.6	8.0	45
1N5241B	11	20	22	+0.076	2	8.0	8.4	41
1N5242B	12	20	30	+0.077	1	8.7	9.1	38
1N5243B	13	9.5	13	+0.079	0.5	9.4	9.9	35
1N5244B	14	9.0	15	+0.082	0.1	9.5	10	32
1N5245B	15	8.5	16	+0.082	0.1	10.5	11	30
1N5246B	16	7.8	17	+0.083	0.1	11.4	12	28
1N5247B	17	7.4	19	+0.084	0.1	12.4	13	27
1N5248B	18	7.0	21	+0.085	0.1	13.3	14	25
1N5249B	19	6.6	23	+0.086	0.1	13.3	14	24
1N5250B	20	6.2	25	+0.086	0.1	14.3	15	23
1N5251B	22	5.6	29	+0.087	0.1	16.2	17	21.2
1N5252B	24	5.2	33	+0.087	0.1	17.1	18	19.1
1N5253B	25	5.0	35	+0.089	0.1	18.1	19	18.2
1N5254B	27	4.6	41	+0.090	0.1	20	21	16.8
1N5255B	28	4.5	44	+0.091	0.1	20	21	16.2
1N5256B	30	4.2	49	+0.091	0.1	22	23	15.1
1N5257B	33	3.8	58	+0.092	0.1	24	25	13.8
1N5258B	36	3.4	70	+0.093	0.1	26	27	12.6
1N5259B	39	3.2	80	+0.094	0.1	29	30	11.5
1N5260B	43	3.0	93	+0.095	0.1	31	33	10.6
1N5261B	47	2.7	105	+0.095	0.1	34	36	9.7
1N5262B	51	2.5	125	+0.096	0.1	37	39	8.9
1N5263B	56	2.2	150	+0.096	0.1	41	43	8.1

1N5265 ~ 1N5271 are available upon your request.

**HIGH SPEED SWITCHING DIODE**

ABOLUTE MAXIMUM RATINGS, GLASS SEALED, DO-35 PACKAGE

Device Type	Peak Voltage $V_{RM}$ (V)	Continuous Reverse Current $I_{RM}$ max $V_R$ (mA)	Forward Voltage $V_F$ max @ $I_F$ (mA)	Capacitance $C_{max}$ (pF)	Reverse Recovery Time $t_{rr}$ max (nS)	Power Dissipation $P_d$ (mW)
1N914	100	5000	75	4	4	250
1N914A	100	5000	75	4	4	250
1N914B	100	5000	75	4	4	250
1N4148	100	5000	75	4	4	500
1N4151	75	50	50	2	2	500
1N4154	35	100	25	4	2	500
1N4448	100	5000	75	4	4	500
1N4454	75	100	50	2	2	500

NOTES: Operating and storage temp.  $-65^{\circ}\text{C} \sim 175^{\circ}\text{C}$

$T_A = 25^{\circ}\text{C}$