

SILICON RECTIFIER BRIDGES
SELECTION GUIDE

T-23-01

Io Amps @ Temp C	1.0 Ta=25 C	1.0 Ta=40 C	1.0 Ta=50 C	1.5 Ta=25 C	1.5 Ta=50 C	2.0 Ta=25 C	2.0 Ta=50 C	2.0 Ta=50 C
Surge (Amps)	50	30	50	50	50	50	50	50
50V	1RB050	1DB050	1FB050	1.5RB050	1.5FB050	2RB050	2FB050	2SB050
100V	1RB100	1DB100	1FB100	1.5RB100	1.5FB100	2RB100	2FB100	2SB100
200V	1RB200	1DB200	1FB200	1.5RB200	1.5FB200	2RB200	2FB200	2SB200
400V	1RB400	1DB400	1FB400	1.5RB400	1.5FB400	2RB400	2FB400	2SB400
600V	1RB600	1DB600	1FB600	1.5RB600	1.5FB600	2RB600	2FB600	2SB600
800V	1RB800	1DB800	1FB800	1.5RB800	1.5FB800	2RB800	2FB800	2SB800
1000V	1RB1000	1DB1000	1FB1000	1.5RB1000	1.5FB1000	2RB1000	2FB1000	2SB1000
Package	Case 3	Case 1	Case 4	Case 3	Case 4	Case 2	Case 4	Case 5A
Industry Types:*								
Motorola			MDA100				MDA200	
G.I.	WLOM	DFM	KBP	WM	KBP	2W	2KBP	
Varo	VE	VM						VS

Io Amps @ Temp C	3.0 Ta=50 C	4.0 Ta=50 C	6.0 Ta=50 C	8.0 Tc=50 C	10.0 Tc=50 C	25.0 Tc=55 C	30.0 Tc=55 C	35.0 Tc=55 C
Surge (Amps)	50	50	125	125	150	300	400	400
50V	3SB050	4FB050	6SB050	8SB050	10SB050	25SB050	30SB050	35SB050
100V	3SB100	4FB100	6SB100	8SB100	10SB100	25SB100	30SB100	35SB100
200V	3SB200	4FB200	6SB200	8SB200	10SB200	25SB200	30SB200	35SB200
400V	3SB400	4FB400	6SB400	8SB400	10SB400	25SB400	30SB400	35SB400
600V	3SB600	4FB600	6SB600	8SB600	10SB600	25SB600	30SB600	35SB600
800V	3SB800	4FB800	6SB800	8SB800	10SB800	25SB800	30SB800	35SB800
1000V	3SB1000	4FB1000	6SB1000	8SB1000	10SB1000	25SB1000	30SB1000	35SB1000
Package	Case 5A	Case 8	Case 5	Case 6	Case 7 +	Case 7 +	Case 7 +	Case 7 +
Industry Types:*								
Motorola							MDA990	MDA3500
G.I.	KBPC1	KBU	KBPC6	KBPC8	KBPC10	KBPC25		KBPC35
Varo			VH		VJ			

* This section is an industry type replacement cross reference list. If you are experiencing price, delivery, quality, or performance problems, or need a second source, this cross reference guide will direct you to the proper ISI equivalent.

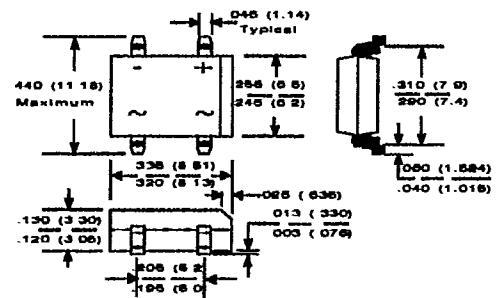
+ Also available with wire leads.

1 AMP DUAL-IN-LINE SURFACE MOUNT BRIDGE

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified
Single phase, half wave, 60 Hz, resistive or inductive load
For capacitive load, derate current by 20%.

	1DS050	1DS100	1DS200	1DS400	1DS600	1DS800	1DS1000	UNITS
Max. Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta = 40 °C	1.0							A
Maximum Forward Surge Current @ 3 ms single half sine wave superimposed on rated current	30.0							A
I ² t Rating For Fusing (t < 3.95 ms)	10.0							A ² t
Max. Forward Voltage Drop per Bridge Element at 1.0 Amp	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element	5.0							µA
	0.5							mA
Operating Temperature Range	-55 to +125							°C
Storage Temperature Range	-55 to +150							°C



Dimensions in Inches and (Millimeters)

SILICON BRIDGE RECTIFIERS

T-23-01

Type	Peak Inverse Voltage PIV Volts	Max. Average Rectifying Current @ half wave res. load 60 Hz		Max. Fwd. Peak Surge Current at 8.3 ms superimposed I _{fm} (surge) Amps (pk)	Maximum Reverse Current @ PIV Ta = 25 C I _r uadc	Maximum Forward Voltage Ta = 25 C	
		I _o Aav	Ta C			I _{fm} Apk	V _{fm} Vpk

Type	Peak Inverse Voltage PIV Volts	Max. Average Rectifying Current @ half wave res. load 60 Hz		Max. Fwd. Peak Surge Current at 8.3 ms superimposed I _{fm} (surge) Amps (pk)	Maximum Reverse Current @ PIV Ta = 25 C I _r uadc	Maximum Forward Voltage Ta = 25 C	
		I _o Aav	Ta C			I _{fm} Apk	V _{fm} Vpk

1 Amp Dual-in-Line Bridge

1DB050	50	1.0	25	50	10	1.0	1.1
1DB100	100	1.0	25	50	10	1.0	1.1
1DB200	200	1.0	25	50	10	1.0	1.1
1DB400	400	1.0	25	50	10	1.0	1.1
1DB600	600	1.0	25	50	10	1.0	1.1
1DB800	800	1.0	25	50	10	1.0	1.1
1DB1000	1000	1.0	25	50	10	1.0	1.1

8 Amp Square Bridge

8SB050	50	8.0	50	125	10	4.0	1.1
8SB100	100	8.0	50	200	10	4.0	1.1
8SB200	200	8.0	50	200	10	4.0	1.1
8SB400	400	8.0	50	200	10	4.0	1.1
8SB600	600	8.0	50	200	10	4.0	1.1
8SB800	800	8.0	50	200	10	4.0	1.1
8SB1000	1000	8.0	50	200	10	4.0	1.1

2 Amp Round Bridge

2RB050	50	2.0	25	50	10	1.0	1.0
2RB100	100	2.0	25	50	10	1.0	1.0
2RB200	200	2.0	25	50	10	1.0	1.0
2RB400	400	2.0	25	50	10	1.0	1.0
2RB600	600	2.0	25	50	10	1.0	1.0
2RB800	800	2.0	25	50	10	1.0	1.0
2RB1000	1000	2.0	25	50	10	1.0	1.0

10 Amp Square Bridge

10SB050	50	10	50	200	10.0	5.0	1.2
10SB100	100	10	50	400	10.0	5.0	1.2
10SB200	200	10	50	400	10.0	5.0	1.2
10SB400	400	10	50	400	10.0	5.0	1.2
10SB600	600	10	50	400	10.0	5.0	1.2
10SB800	800	10	50	400	10.0	5.0	1.2
10SB1000	1000	10	50	400	10.0	5.0	1.2

4 Amp Flat Bridge

4FB050	50	4.0	50	200	10	3.0	1.1
4FB100	100	4.0	50	200	10	3.0	1.1
4FB200	200	4.0	50	200	10	3.0	1.1
4FB400	400	4.0	50	200	10	3.0	1.1
4FB600	600	4.0	50	200	10	3.0	1.1
4FB800	800	4.0	50	200	10	3.0	1.1
4FB1000	1000	4.0	50	200	10	3.0	1.1

25 Amp Square Bridge

25SB050	50	25	50	200	10.0	12.5	1.2
25SB100	100	25	50	300	10.0	12.5	1.2
25SB200	200	25	50	300	10.0	12.5	1.2
25SB400	400	25	50	300	10.0	12.5	1.2
25SB600	600	25	50	300	10.0	12.5	1.2
25SB800	800	25	50	300	10.0	12.5	1.2
25SB1000	1000	25	50	300	10.0	12.5	1.2

6 Amp Square Bridge

6SB050	50	6.0	50	200	10	3.0	1.1
6SB100	100	6.0	50	200	10	3.0	1.1
6SB200	200	6.0	50	200	10	3.0	1.1
6SB400	400	6.0	50	200	10	3.0	1.1
6SB600	600	6.0	50	200	10	3.0	1.1
6SB800	800	6.0	50	200	10	3.0	1.1
6SB1000	1000	6.0	50	200	10	3.0	1.1

35 Amp Square Bridge

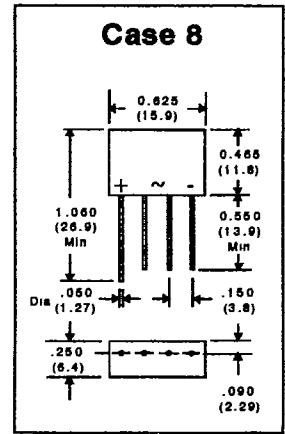
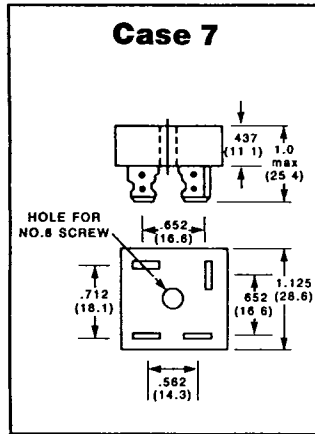
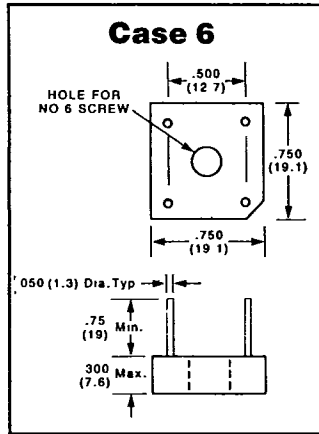
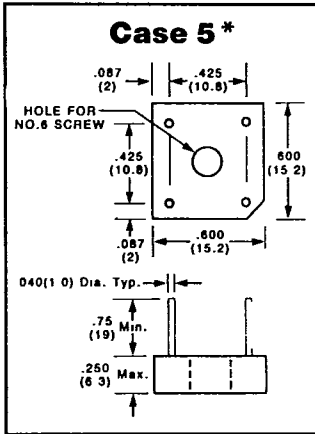
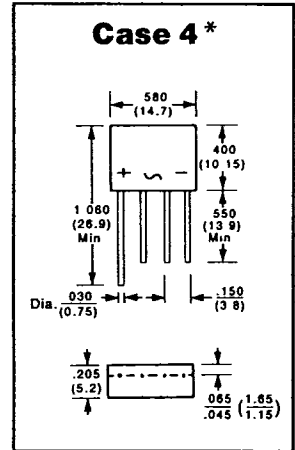
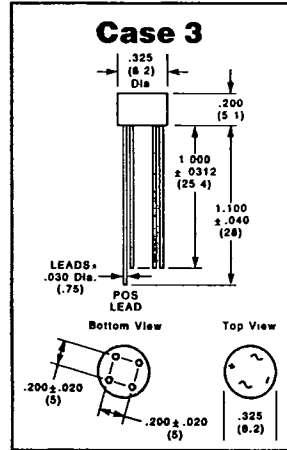
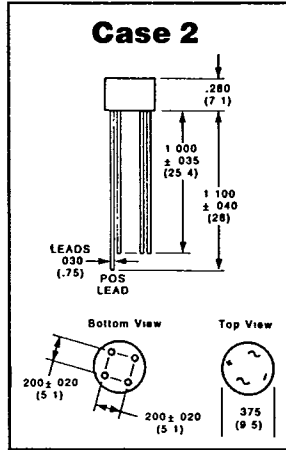
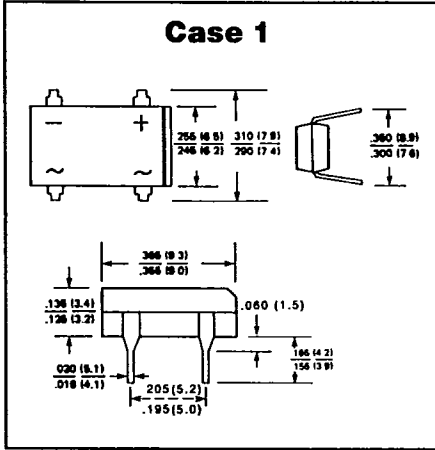
35SB050	50	35	50	400	10.0	17.5	1.2
35SB100	100	35	50	400	10.0	17.5	1.2
35SB200	200	35	50	400	10.0	17.5	1.2
35SB400	400	35	50	400	10.0	17.5	1.2
35SB600	600	35	50	400	10.0	17.5	1.2
35SB800	800	35	50	400	10.0	17.5	1.2
35SB1000	1000	35	50	400	10.0	17.5	1.2

FAST RECOVERY

All of the above bridges are available in fast recovery versions. Designate by adding suffix "R"

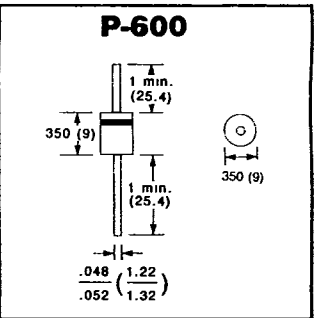
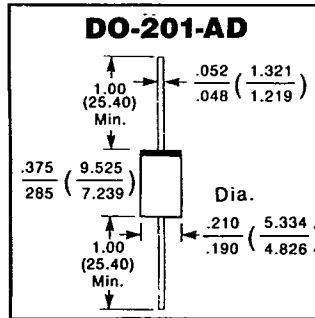
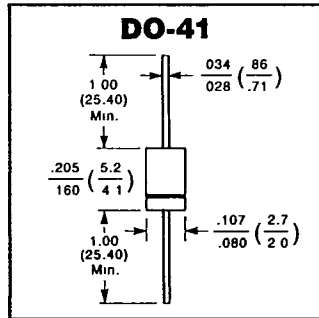
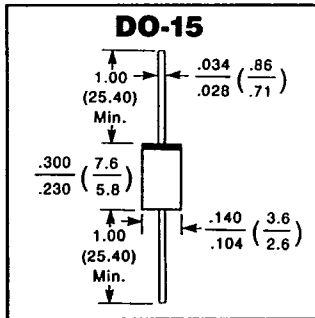
Package Designs

BRIDGE RECTIFIERS

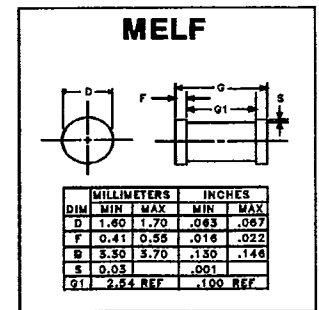
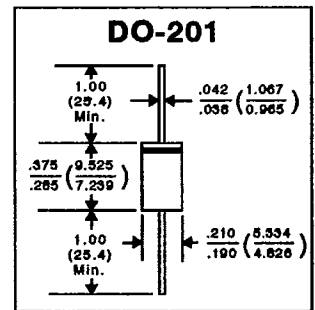


* Case 5A is the same as Case 5 except lead dia. = .030

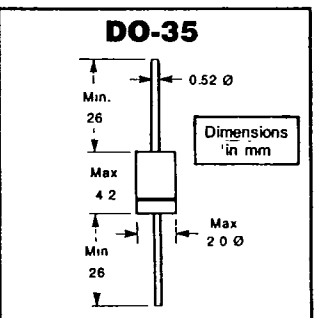
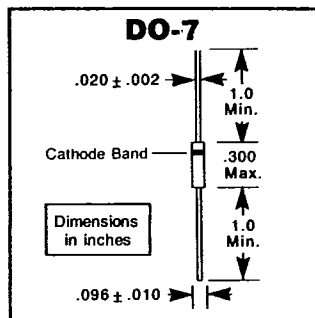
SILICON RECTIFIERS/SCHOTTKY RECTIFIERS/TRANSIENT VOLTAGE



SUPPRESSORS



SILICON DIODES



Dimensions are shown in inches and (millimeters) unless otherwise specified.