

### 5 Amp Silicon Bridge Rectifiers in Plastic Case

| Dimensions in mm. | Plastic Case | Voltage<br>100 to 1.000 V.  |
|-------------------|--------------|---|
|                   |              | <b>Current<br/>5.0 A.</b>   |
|                   |              | <ul style="list-style-type: none"> <li>• In process of evaluation UL 1449</li> <li>• Low Cost</li> <li>• Case: Epoxy encapsulation</li> <li>• Terminals: Radial in-line</li> <li>• Ideal for P.C.B.</li> </ul> Lead and polarity identifications<br>High surge current capability |

### Maximum Ratings, according to IEC publication No. 134

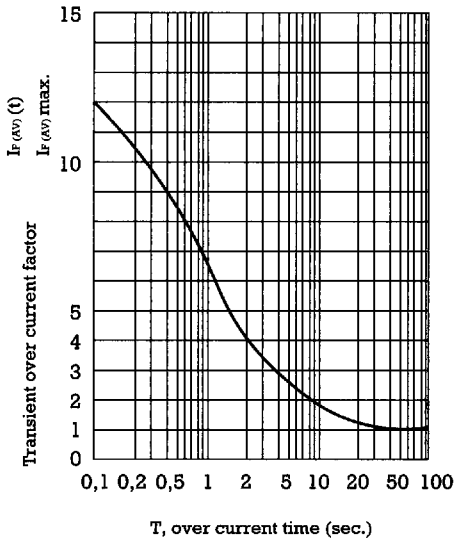
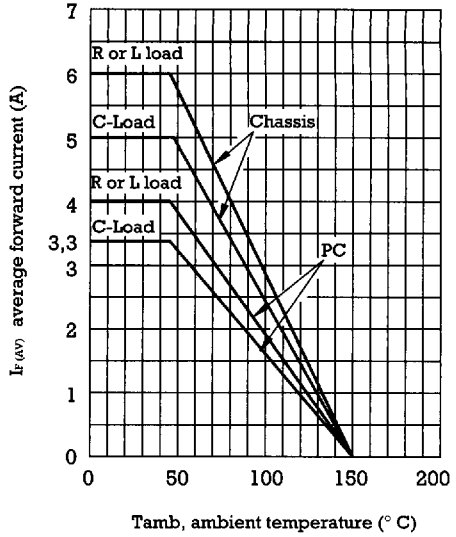
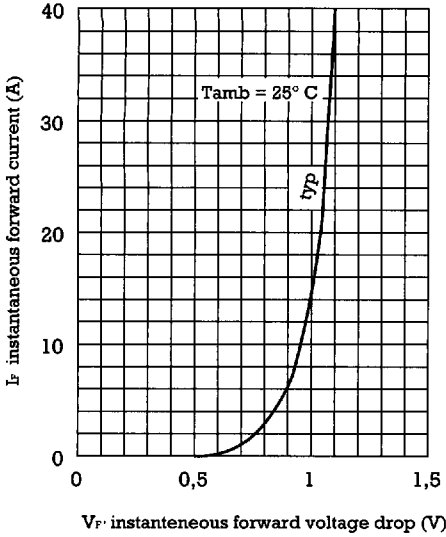
|             |   | B40   | B80        | B125                             | B250       | B380       | B500       |
|-------------|---|---|------------|----------------------------------|------------|------------|------------|
|             |   | C5000/3300  | C5000/3300 | C5000/3300                       | C5000/3300 | C5000/3300 | C5000/3300 |
| $V_{RRM}$   | Peak recurrent reverse voltage (V)        | 100   | 200        | 300                              | 600        | 900        | 1000       |
| $V_N$       | Recommended input voltage ( $V_{RMS}$ )   | 40  | 80         | 125                              | 250        | 380        | 500        |
| $I_{F(AV)}$ | Forward current at $T_{amb} = 45^\circ C$ | - PC mounted<br>R load<br>C load<br>- Chassis mounted<br>R load<br>C load |            | 4.0 A<br>3.3 A<br>6.0 A<br>5.0 A |            |            |            |
| $I_{FRM}$   | Recurrent peak forward current            | 30 A  |            |                                  |            |            |            |
| $I_{FSM}$   | 10 ms. peak forward surge current         | 250 A   |            |                                  |            |            |            |
| $I^2t$      | $I^2t$ value for fusing ( $t = 10$ ms)    | 300 A <sup>2</sup> S  |            |                                  |            |            |            |
| $T_j$       | Max. operating temperature                | + 150°C   |            |                                  |            |            |            |
| $T_{stg}$   | Storage temperature range                 | - 40 to + 150 °C  |            |                                  |            |            |            |

### Electrical Characteristics at $T_{amb} = 25^\circ C$

|       |  |            |
|-------|--|------------|
| $V_F$ | Max. forward voltage drop per arm at $I_F = 5$ A | 1 V        |
| $I_R$ | Max. reverse current per arm at $V_{RRM}$        | 20 $\mu$ A |

FAGOR ELECTRONICS

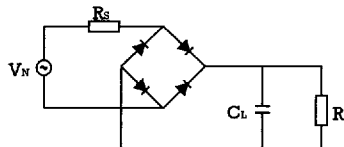
Characteristic Curves



OPERATION WITH CAPACITIVE LOAD

Limit values of  $R_s$  and  $C_L$  for adequate protection against switching transients.

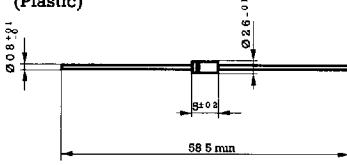
| Recommended input voltage $V_{RMS}$ | Min. $R_s$ Tol $\pm 10\%$ Ohms | Max. $C_L$ Tol $\pm 50\%$ - $20\%$ $\mu F$ |
|-------------------------------------|--------------------------------|--|
| 40                                  | 0,5                            | 10.000                                     |
| 80                                  | 1,0                            | 5,000                                      |
| 125                                 | 1,5                            | 2.500                                      |
| 250                                 | 3,0                            | 1.200                                      |
| 380                                 | 5,0                            | 800  |
| 500                                 | 6,0                            | 600  |



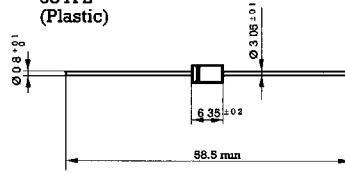
**Package Outlines**

Dimensions in mm.

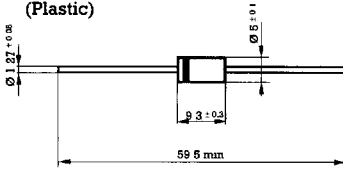
**1** DO-41  
(Plastic)



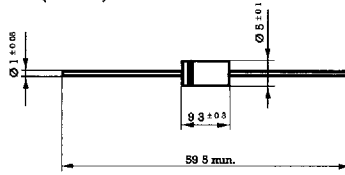
**2** DO-15  
F-126  
58 A 2  
(Plastic)



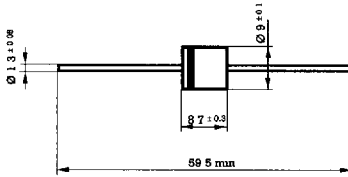
**3** DO-27 A  
DO-201 AD  
(Plastic)



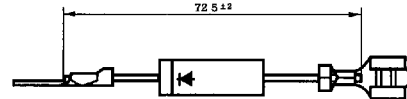
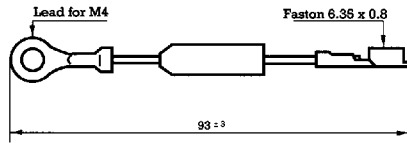
**4** DO-201 AE  
(Plastic)



**5** P-6  
(Plastic)

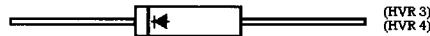
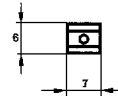
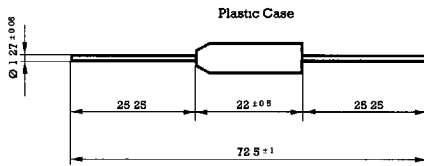


**7**



Suffix E1

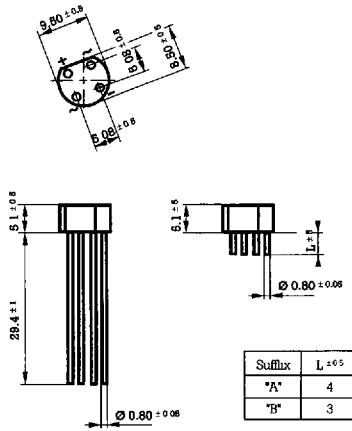
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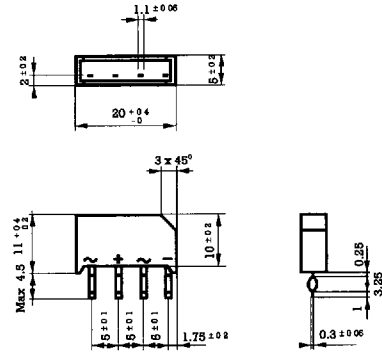
Package Outlines

Dimensions in mm

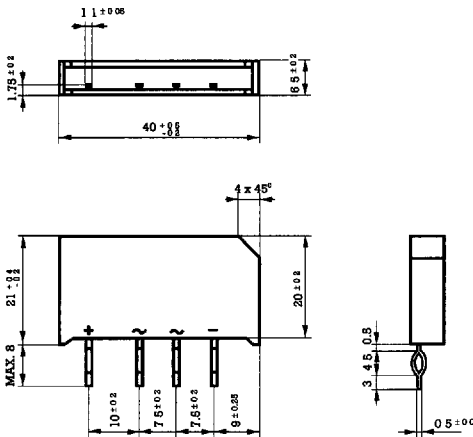
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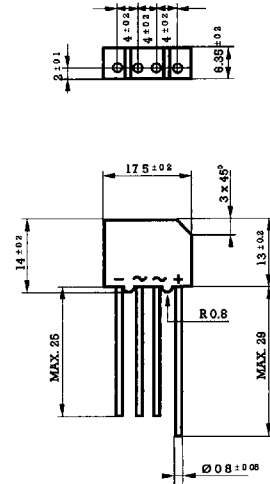
9



10



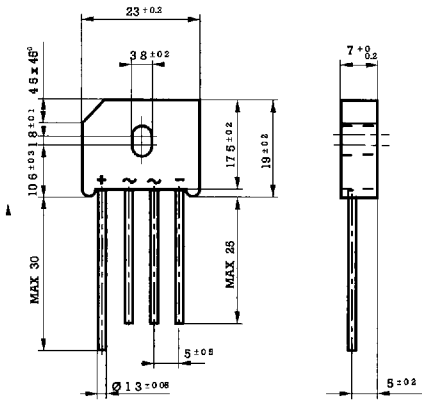
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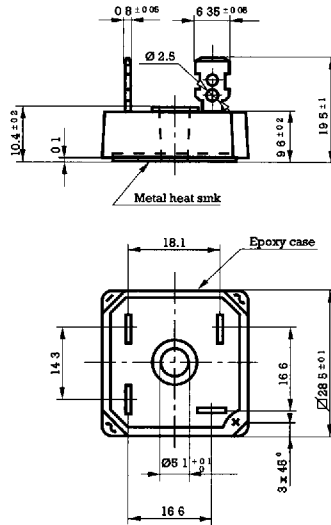
**Package Outlines**

Dimensions in mm.

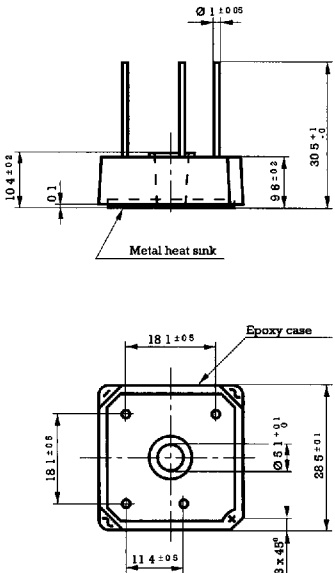
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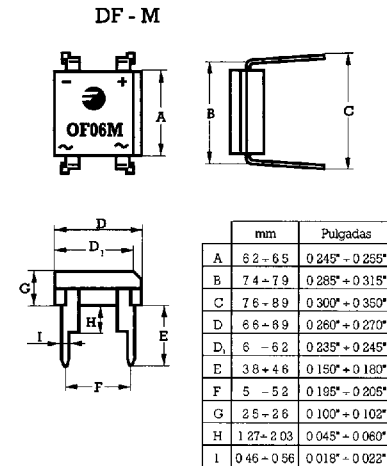
**13**



**14**



**15**

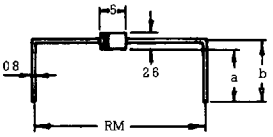
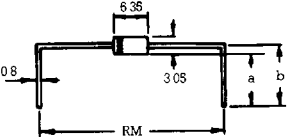
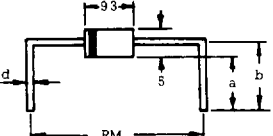
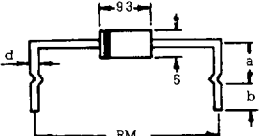
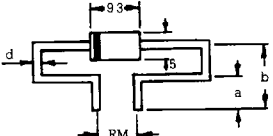
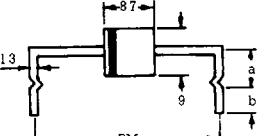




**Standard lead forming specifications**

**Dimensions in mm.**

Plastic Cases

|   |                     |            |  |                     |            |             |
|---|---------------------|------------|--|---------------------|------------|-------------|
| DO-41<br>                              | Type                | Dimensions |  |                     |            |             |
|   |                     | a          | b  | RM                  |            |             |
|   |                     | C2-3       | 3 ± 0.5  | 43 ± 0.5            | 10 ± 0.5   |             |
|   |                     | C2-5       | 10 ± 0.5   | 113 ± 0.5           | 10 ± 0.5   |             |
|   | C2-8                | 4 ± 0.5    | 53 ± 0.5   | 10 ± 0.5            |            |             |
| DO-15<br>                              | Type                | Dimensions |  |                     |            |             |
|   |                     | a          | b  | RM                  |            |             |
|   |                     | C2-3       | 3 ± 0.5  | 45 ± 0.5            | 10 ± 0.5   |             |
|   |                     | C2-5       | 10 ± 0.5   | 115 ± 0.5           | 10 ± 0.5   |             |
|   | C2-8                | 4 ± 0.5    | 55 ± 0.5   | 10 ± 0.5            |            |             |
| DO-201AD<br>DO-27A<br>(d = 1.27)<br>   | DO-201AE<br>(d = 1) | Type       | Dimensions   |                     |            |             |
|   |                     |            | a  | b                   | RM         |             |
|   |                     |            | C2-1   | 35 ± 0.5            | 6 ± 0.5    | 15 ± 0.5    |
|   |                     |            | C2-2   | 4 ± 0.5             | 65 ± 0.5   | 15 ± 0.5    |
|   |                     |            | C2-4   | 7.5 ± 0.3           | 10 ± 0.3   | 17.8 ± 0.15 |
|   |                     |            | C2-6   | 3.5 ± 0.5           | 6 ± 0.5    | 17.5 ± 0.5  |
|   |                     |            | C2-7   | 4.5 ± 0.5           | 7 ± 0.5    | 21 ± 0.5    |
|   |                     |            | C2-11  | 4.5 ± 0.5           | 7 ± 0.5    | 17.5 ± 0.5  |
|   |                     |            | C2-12  | 12.5 ± 0.5          | 15 ± 0.5   | 17.5 ± 0.5  |
|   |                     |            | C2-13  | 16 ± 0.5            | 18.5 ± 0.5 | 15.2 ± 0.5  |
|   |                     |            | C2-14  | 7.5 ± 0.5           | 10 ± 0.5   | 15 ± 0.5    |
|   |                     |            | C2-17  | 4 ± 0.5             | 8.5 ± 0.5  | 20 ± 0.5    |
|   |                     |            | DO-201AD<br>DO-27A<br>(d = 1.27)<br> | DO-201AE<br>(d = 1) | Type       | Dimensions  |
| a   | b                   | RM         |  |                     |            |             |
| C6-1  | 10 ± 0.5            | 5 ± 0.5    |  |                     |            | 15.2 ± 0.5  |
| C6-2  | 10 ± 0.5            | 5 ± 0.5    |  |                     |            | 17.5 ± 0.5  |
| C6-3  | 7 ± 0.5             | 5 ± 0.5    |  |                     |            | 21 ± 0.5    |
| C6-4  | 13.5 ± 0.5          | 5 ± 0.5    |  |                     |            | 15.2 ± 0.5  |
|   | C6-5                | 10 ± 0.5   | 5 ± 0.5  | 20 ± 0.5            |            |             |
| DO-201AD<br>DO-27A<br>(d = 1.27)<br> | DO-201AE<br>(d = 1) | Type       | Dimensions   |                     |            |             |
|   |                     |            | a  | b                   | RM         |             |
|   | C4-2                | 4.5 ± 0.3  | 10.5 ± 0.3   | 7.5 ± 0.5           |            |             |
| P-6<br>                              | Type                | Dimensions |  |                     |            |             |
|   |                     | a          | b  | RM                  |            |             |
|   |                     | C6-1       | 10 ± 0.5   | 5 ± 0.5             | 15.2 ± 0.5 |             |
|   |                     | C6-2       | 10 ± 0.5   | 5 ± 0.5             | 17.5 ± 0.5 |             |
|   |                     | C6-3       | 7 ± 0.5  | 5 ± 0.5             | 21 ± 0.5   |             |
|   | C6-4                | 13.5 ± 0.5 | 5 ± 0.5  | 15.2 ± 0.5          |            |             |