



FAGOR ELECTRONICS

## 5 Amp. Fast Recovery Silicon Diodes

T-03-17

<p>Dimensions in mm.</p> <p>P-6 (Plastic)</p>	<p>Voltage 50 to 600 V.</p> <p>Current 5.0 A. at 55°C.</p>
<p><b>Mounting instructions</b></p> <ol style="list-style-type: none"> <li>1. Min. distance from body to soldering point, 4 mm.</li> <li>2. Max. solder temperature, 350°C.</li> <li>3. Max. soldering time, 3,5 sec.</li> <li>4. Do not bend lead at a point closer than 4 mm to the body.</li> </ol>	<ul style="list-style-type: none"> <li>• Fast Recovery Diodes</li> <li>• Diffused junction</li> <li>• High surge capability</li> <li>• The plastic material carries U/L recognition 94 V-0</li> <li>• Terminals: Axial Leads</li> <li>• Polarity: Color band denotes cathode</li> </ul>

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

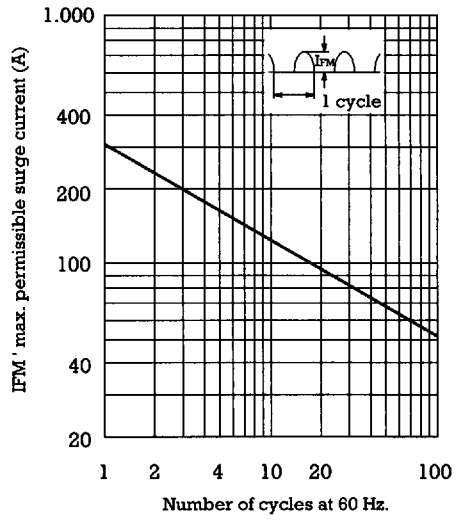
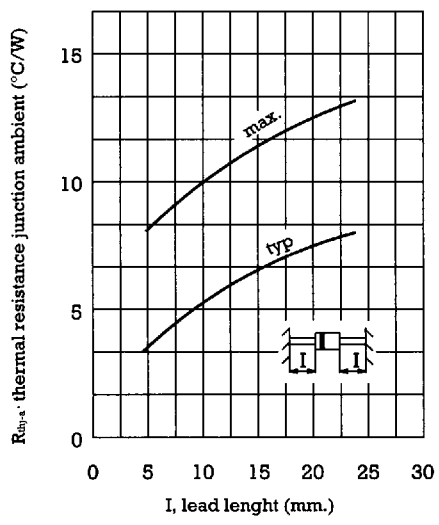
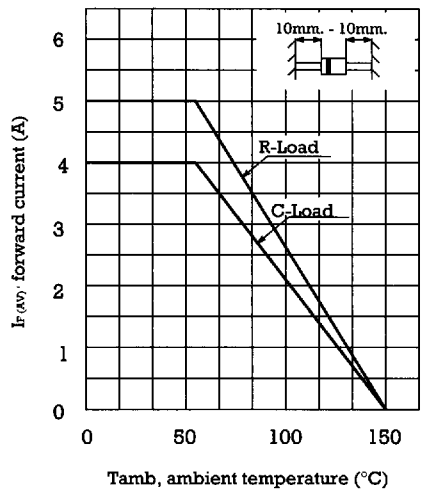
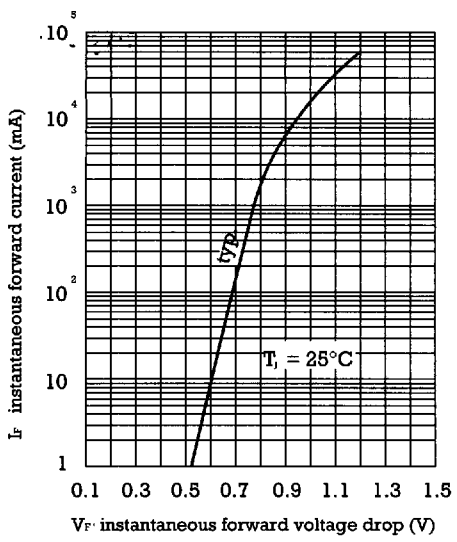
		MR 820	MR 821	MR 822	MR 824	MR 826
$V_{RRM}$	Peak recurrent and non recurrent reverse voltage	50	100	200	400	600
$I_{F(AV)}$	Forward current, R load at $T_{amb} = 55^\circ C$	5 A				
$I_{FRM}$	Recurrent peak forward current (A)	60 A				
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec method)	300 A				
$t_{rr}$	Max. reverse recovery time from $I_F = 1\text{ A}$ to $V_R = 30\text{ V}$ $I_F = 0.5\text{ A}$ $I_R = 1\text{ A}$ with $I_{rr} = 0.25\text{ A}$	200 ns 150 ns				
$T_j$	Max. operating temperature	+ 150°C				
$T_{stg}$	Storage temperature range	- 65 to + 150 °C				

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

$V_F$	Max. forward voltage drop at $I_F = 5\text{ A}$	1.0 V
$I_R$	Max. reverse current at $V_{RRM}$ at 25°C	25 $\mu$ A
$R_{th-a}$	Max. thermal resistance ( $l = 10\text{ mm.}$ )	10° C/W

Characteristic Curves

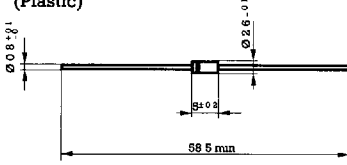
FAGOR ELECTRONICS



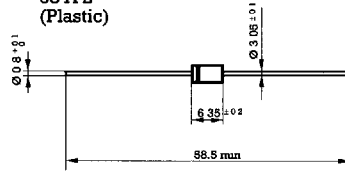
**Package Outlines**

Dimensions in mm.

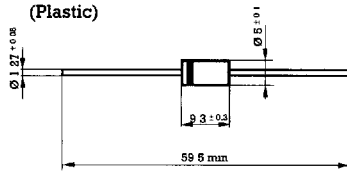
**1** DO-41  
(Plastic)



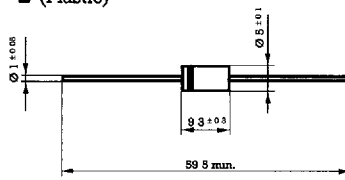
**2** DO-15  
F-126  
58 A 2  
(Plastic)



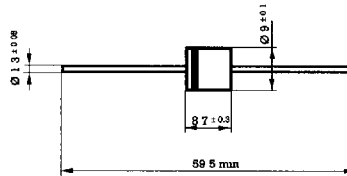
**3** DO-27 A  
DO-201 AD  
(Plastic)



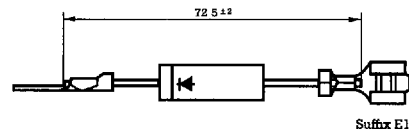
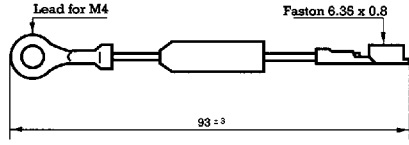
**4** DO-201 AE  
(Plastic)



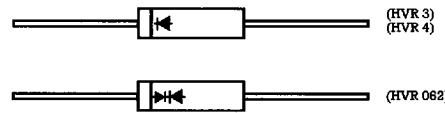
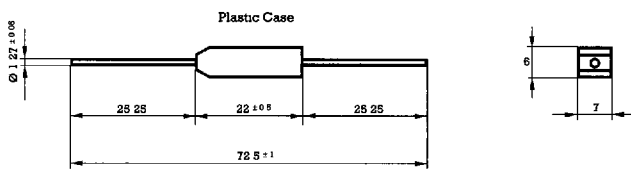
**5** P-6  
(Plastic)



**7**

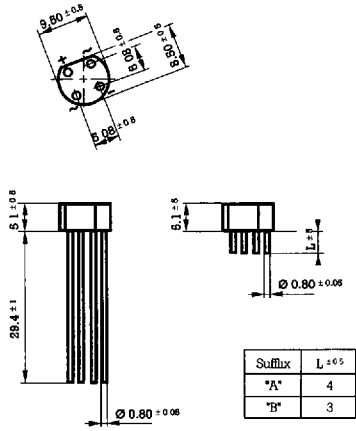


**6**

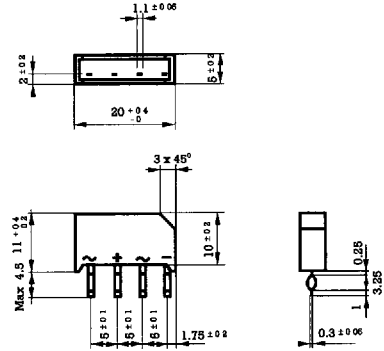


Package Outlines Dimensions in mm

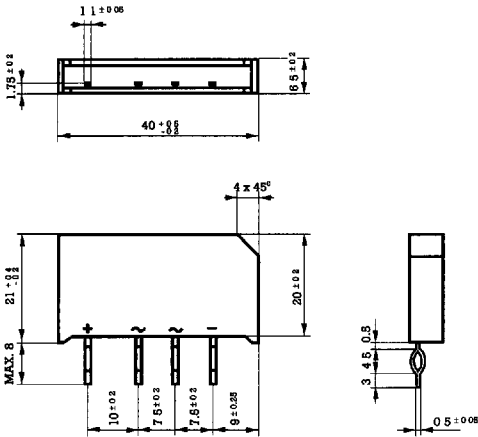
**8**



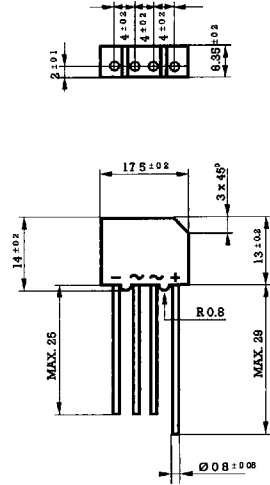
**9**



**10**



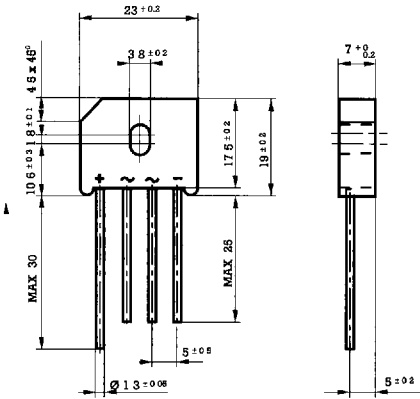
**11**



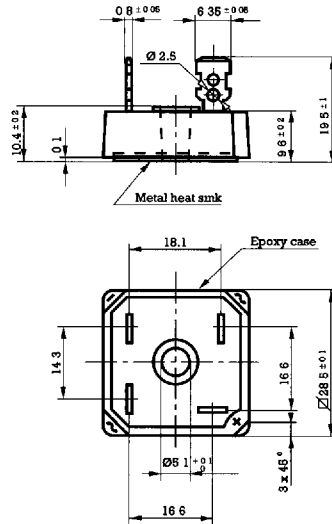
Package Outlines

Dimensions in mm.

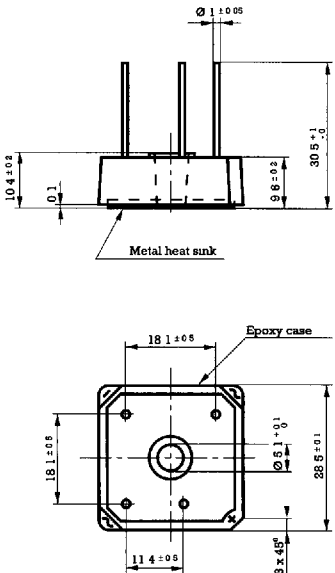
12



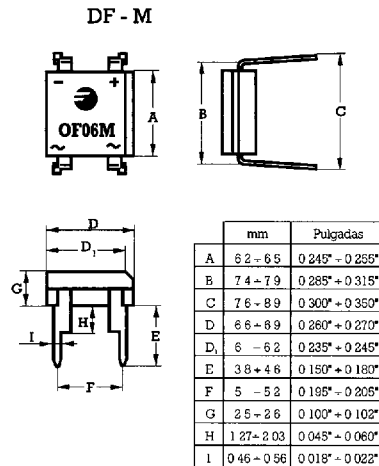
13



14



15

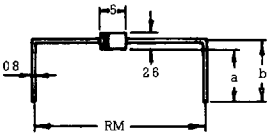
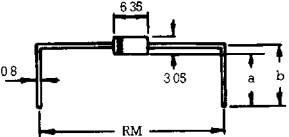
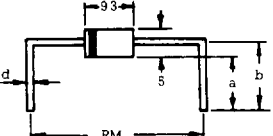
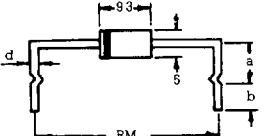
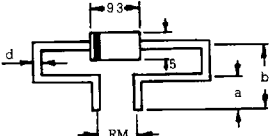
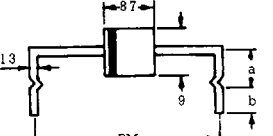




**Standard lead forming specifications**

**Dimensions in mm.**

Plastic Cases

DO-41 	Type	Dimensions				
		a	b	RM		
		C2-3	3 ± 0.5	4.3 ± 0.5	10 ± 0.5	
		C2-5	10 ± 0.5	11.3 ± 0.5	10 ± 0.5	
	C2-8	4 ± 0.5	5.3 ± 0.5	10 ± 0.5		
DO-15 	Type	Dimensions				
		a	b	RM		
		C2-3	3 ± 0.5	4.5 ± 0.5	10 ± 0.5	
		C2-5	10 ± 0.5	11.5 ± 0.5	10 ± 0.5	
	C2-8	4 ± 0.5	5.5 ± 0.5	10 ± 0.5		
DO-201AD DO-27A (d = 1.27) 	DO-201AE (d = 1)	Type	Dimensions			
			a	b	RM	
			C2-1	3.5 ± 0.5	6 ± 0.5	15 ± 0.5
			C2-2	4 ± 0.5	6.5 ± 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 DO-27A (d = 1.27) 	DO-201AE (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 DO-27A (d = 1.27) 	DO-201AE (d = 1)	Type	Dimensions			
			a	b	RM	
	C4-2	4.5 ± 0.3	10.5 ± 0.3	7.5 ± 0.5		
P-6 	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		