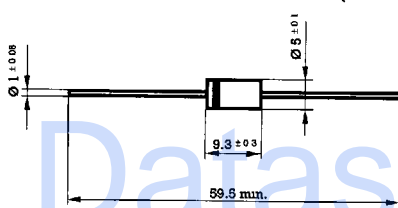


**5 W Zener Diodes**

<p><b>Dimensions in mm.</b></p> 	<p><b>DO-201AE (Plastic)</b></p>	<p><b>Voltage</b> 8.7 to 200 V</p> <p><b>Power</b> 5.0 W</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 3 mm. to the body.</li> </ol>		<p>Standard Voltage Tolerance is ± 5%</p> <ul style="list-style-type: none"> <li>• Diffused junction</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**

$P_{tot}$	Power dissipation at $T_{amb} = 75\text{ °C}$	5 W
$P_{ZSM}$	Non repetitive peak zener dissipation ( $t = 8.3\text{ ms}$ )	180 W
$T_j$	Max. operating temperature	+ 175 °C
$T_{stg}$	Storage temperature range	- 55 to + 175 °C

**Electrical Characteristics at  $T_{amb} = 25\text{ °C}$**

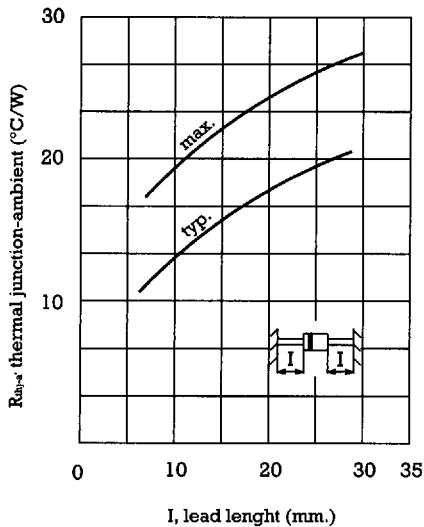
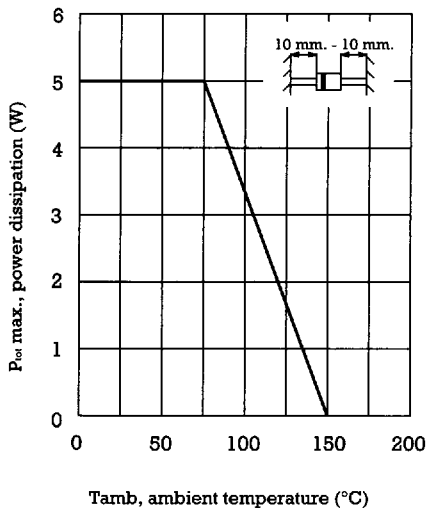
$V_F$	Max. forward voltage drop at $I_F = 3.0\text{ A}$	1.2 V
$R_{th-a}$	Max. thermal resistance at: 10 mm. lead length	20° C/W

Type	Nominal <sup>(1)</sup> Zener Voltage $V_Z$ at $I_{ZT}$	Test Current $I_{ZT}$	Maximum Zener Impedance for A & B Suffix only			Maximum Reverse Leakage Current Test Voltage Suffix A & not Suffix			Max Surge Current $I_{ZS}$	Maximum Regulator Current $I_{ZM}$
	(V)	(mA)	$Z_{ZT}$ at $I_{ZT}$	$Z_{ZK}$ at $I_{ZK}$	$I_{ZK}$	$I_R$	(V)	(V)	(A)	(mA)
1N5345B	8.7	150	2.0	200	1	10.0	6.3	6.6	9.5	545
1N5346B	9.1	150	2.0	150	1	7.5	6.6	6.9	9.2	520
1N5347B	10	125	2.0	125	1	5.0	7.2	7.6	8.6	475
1N5348B	11	125	2.5	125	1	5.0	8.0	8.4	8.0	430
1N5349B	12	100	2.5	125	1	2.0	8.6	9.1	7.5	395
1N5350B	13	100	2.5	100	1	1.0	9.4	9.9	7.0	365
1N5351B	14	100	2.5	75	1	1.0	10.1	10.6	6.7	340
1N5352B	15	75	2.5	75	1	1.0	10.8	11.5	6.3	315
1N5353B	16	75	2.5	75	1	1.0	11.5	12.2	6.0	295
1N5354B	17	70	2.5	75	1	0.5	12.2	12.9	5.8	280
1N5355B	18	65	2.5	75	1	0.5	13.0	13.7	5.5	264
1N5356B	19	65	3.0	75	1	0.5	13.7	14.4	5.3	250
1N5357B	20	65	3.0	75	1	0.5	14.4	15.2	5.1	237
1N5358B	22	50	3.5	75	1	0.5	15.8	16.7	4.7	216
1N5359B	24	50	3.5	100	1	0.5	17.3	18.2	4.4	198
1N5360B	25	50	4.0	110	1	0.5	18.0	19.0	4.3	190
1N5361B	27	50	5.0	120	1	0.5	19.4	20.6	4.1	176
1N5362B	28	50	6.0	130	1	0.5	20.1	21.2	3.9	170
1N5363B	30	40	8.0	140	1	0.5	21.6	22.8	3.7	158
1N5364B	33	40	10.0	150	1	0.5	23.8	25.1	3.5	144
1N5365B	36	30	11.0	160	1	0.5	25.9	27.4	3.3	132
1N5366B	39	30	14.0	170	1	0.5	28.1	29.7	3.1	122
1N5367B	43	30	20.0	190	1	0.5	31.0	32.7	2.8	110
1N5368B	47	25	25.0	210	1	0.5	33.8	35.8	2.7	100
1N5369B	51	25	27.0	230	1	0.5	36.7	38.8	2.5	93
1N5370B	56	20	35.0	280	1	0.5	40.3	42.6	2.3	86
1N5371B	60	20	40.0	350	1	0.5	43.0	45.5	2.2	79
1N5372B	62	20	42.0	400	1	0.5	44.6	47.1	2.1	76
1N5373B	68	20	44.0	500	1	0.5	49.0	51.7	2.0	70
1N5374B	75	20	45.0	620	1	0.5	54.0	56.0	1.9	63
1N5375B	82	15	65.0	720	1	0.5	59.0	62.2	1.8	58
1N5376B	87	15	75.0	760	1	0.5	63.0	66.0	1.7	54.5
1N5377B	91	15	75.0	760	1	0.5	65.5	69.2	1.6	52.5
1N5378B	100	12	90.0	800	1	0.5	72.0	76.0	1.5	47.5
1N5379B	110	12	125.0	1000	1	0.5	79.2	83.6	1.4	43
1N5380B	120	10	170.0	1150	1	0.5	86.4	91.2	1.3	39.5
1N5381B	130	10	190.0	1250	1	0.5	93.6	98.8	1.2	36.5
1N5382B	140	8	230.0	1500	1	0.5	101.0	106.0	1.2	34
1N5383B	150	8	330.0	1500	1	0.5	108.0	114.0	1.1	31.6
1N5384B	160	8	350.0	1650	1	0.5	115.0	122.0	1.1	29.4
1N5385B	170	8	380.0	1750	1	0.5	122.0	129.0	1.0	28
1N5386B	180	5	430.0	1750	1	0.5	130.0	137.0	1.0	26.4
1N5387B	190	5	450.0	1850	1	0.5	137.0	144.0	0.9	25
1N5388B	200	5	480.0	1850	1	0.5	144.0	152.0	0.9	23.6

(1) Tested with pulses Pulse test  $t_p \leq 50$  ms,  $\delta < 2\%$

Characteristic Curves

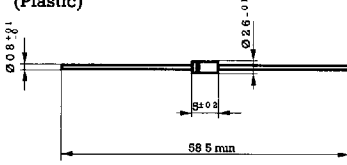
FAGOR ELECTRONICS



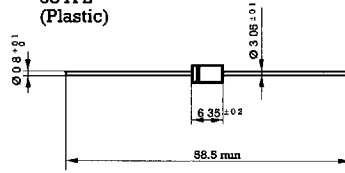
**Package Outlines**

Dimensions in mm.

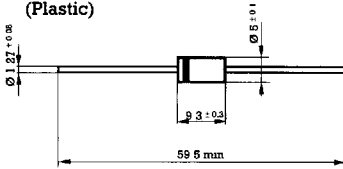
**1** DO-41  
(Plastic)



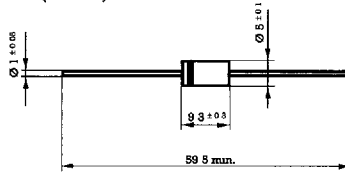
**2** DO-15  
F-126  
58 A 2  
(Plastic)



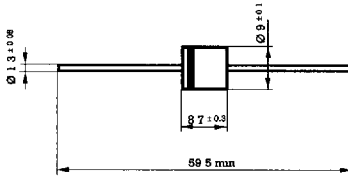
**3** DO-27 A  
DO-201 AD  
(Plastic)



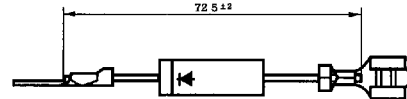
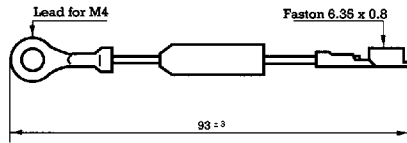
**4** DO-201 AE  
(Plastic)



**5** P-6  
(Plastic)

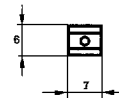
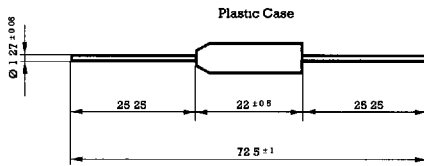


**7**



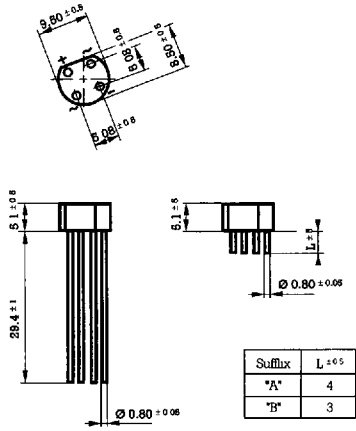
Suffix E1

**6**

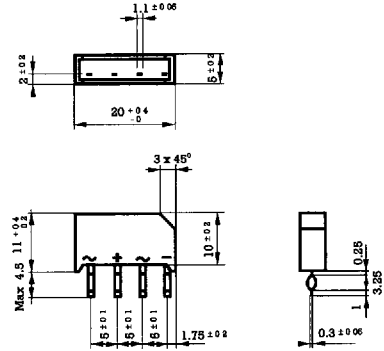


Package Outlines Dimensions in mm

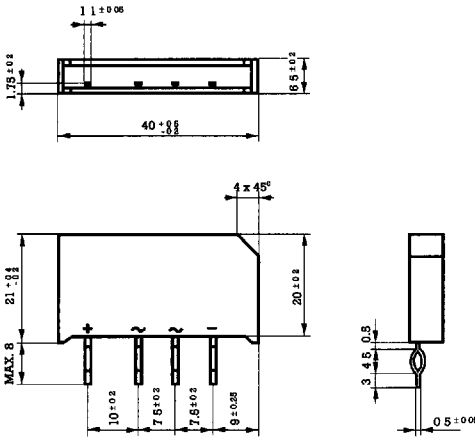
**8**



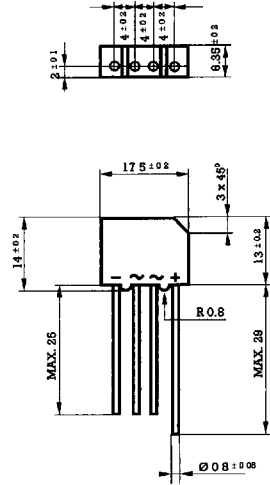
**9**



**10**



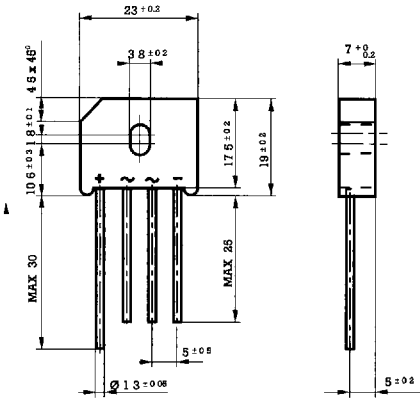
**11**



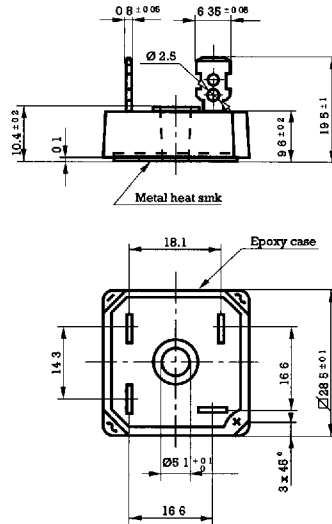
**Package Outlines**

**Dimensions in mm.**

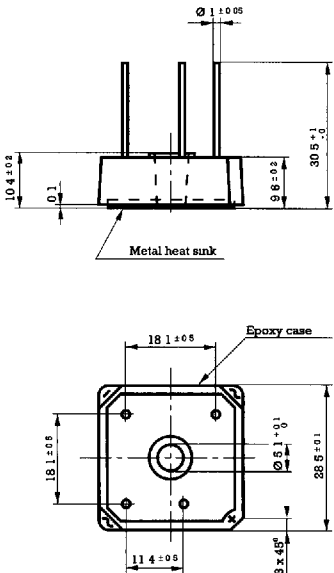
**12**



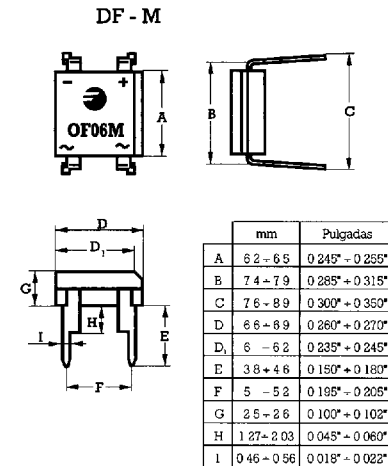
**13**



**14**



**15**



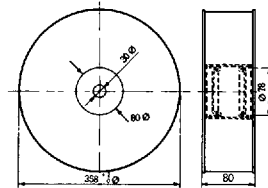
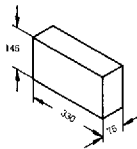
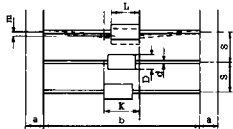
### Packaging specifications

Dimensions in mm.

REEL PACKAGING (Under IEC-CEI 286-1 and RS-296 D)

CASE TYPE (OUTLINE)	REEL DIMENSIONS					UNITS PER REEL	APROX GROSS WEIGHT PER REEL PACKED
	K	b	S	m	a		
(1) DO41 (Plastic)	64	53 ± 2	5 ± 0.5	1.2	6 ± 1	6000	2.5 kg (5.52 Lbs)
(2) DO15 (Plastic)	785	53 ± 2	5 ± 0.5	1.2	6 ± 1	5000	2.3 kg (5.07 Lbs)
(3) DO201AD (Plastic) (4) DO201AE (Plastic)	11	53 ± 2	10 ± 0.5	1.2	6 ± 1	1500	2 kg (4.41 Lbs)
(5) P-6 (Plastic)	1127	53 ± 2	10 ± 0.5	1.2	6 ± 1	1000	3 kg (6.61 Lbs)

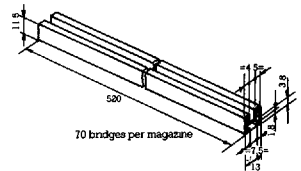
REEL PACKAGING



AMMO BOX PACKAGING (SUFFIX \*AMP)

OUTLINES	BOX SIZE	UNITS PER BOX	APROX GROSS WEIGHT PER REEL PACKED
D0-41 (Plastic)	330 x 75 x 145	6000	2.20 kg (4.85 Lbs)
D0-15 (Plastic)	330 x 75 x 145	5000	2.20 kg (4.85 Lbs)
D0-201AD (Plastic)	330 x 75 x 145	1500	1.85 kg (4.08 Lbs)
D0-201ED (Plastic)	330 x 75 x 145	1500	1.85 kg (4.08 Lbs)
P-600	330 x 75 x 145	500	1.2 kg (2.65 Lbs)

DIL PACKAGING  
ANTISTATIC PLASTIC TUBF



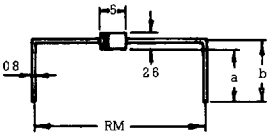
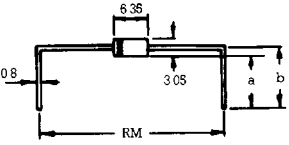
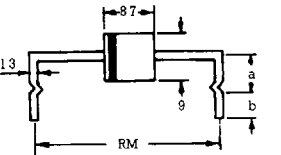
BOX PACKAGING

DEVICE TYPE (OUTLINE)	BOX SIZE	UNITS PER BOX	APROX GROSS WEIGHT
(6) (7) HVR3, HVR4 HVR062 (7) = Suffix E1	70 x 105 x 205	(6) 250 (7) 200	0.710 kg (1.560 Lbs)
(8) B C800, C1000, C1500 R, WL F, WF / (*A)	70 x 105 x 205	500 / (1.500)	0.650 kg (1.430 Lbs)
(9) B C1500/1000, C2000/1500	70 x 105 x 205	500	1.100 kg (2.425 Lbs)
(10) B . C3700/2200	70 x 105 x 205	100	1.100 kg (2.425 Lbs)
(10) B . C500/3300, C5000/3300-400	70 x 105 x 205	100	1.100 kg (2.425 Lbs)
(11) FBP, 2FBP	215 x 85 x 335	500	2.10 kg (4.62 Lbs)
(12) FBU 4 - 6 - 8	270 x 90 x 400	500	4.20 kg (9.23 Lbs)
(13) FB 10 - 15 - 25 - 35 - 50 B 10 - 15 - 25 - 35 - 50	70 x 105 x 205	50	0.850 kg (1.872 Lbs)
(14) FB 10L - 15L - 25L B 10L - 15L - 25L	35 x 135 x 205	20	0.350 kg (0.770 Lbs)
DF - M	540 x 145 x 110	5.600	4.0 kg (8.82 Lbs.)

**Standard lead forming specifications**

**Dimensions in mm.**

Plastic Cases

DO-41 	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 	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 DO-27A (d = 1.27)	DO-201AE (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 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		