

MZF 2.7 THRU MZF 33

LEAD MOUNTED SILICON RECTIFIERS

50-1000 VOLTS
DIFFUSED JUNCTION

500 Milliwatt surmetic 20 silicon zener diodes — a complete series of Zener Diodes in the popular DO-7 case in an axial-lead, transfer-molded plastic package offering protection in all common environmental conditions.

MAXIMUM RATINGS

Junction and Storage Temperature: -65 to +200°C

Lead Temperature not less than 1/16" from the case for 10 seconds: 230°C

DC Power Dissipation: 500 mW @ $T_i = 75^\circ\text{C}$, Lead Length = $\frac{3}{8}$ "
(Derate 4.0 mW/°C above 75°C)

Surge Power: 10 Watts (Non-recurrent square wave @ $PW = 8.3$ ms, $T = 55^\circ\text{C}$ Figure 16)

MECHANICAL CHARACTERISTICS

CASE: Void free, transfer molded, thermosetting plastic.

FINISH: All external surfaces are corrosion resistant. Leads are readily solderable and weldable.

POLARITY: Cathode indicate by color band. When operated in zener mode, cathode will be positive with respect to anode.

MOUNTING POSITION: Any.

WEIGHT: 0.18 gram (approximately).

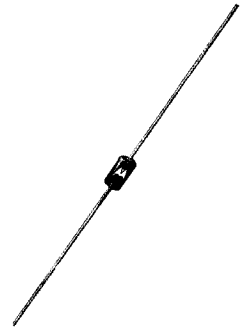
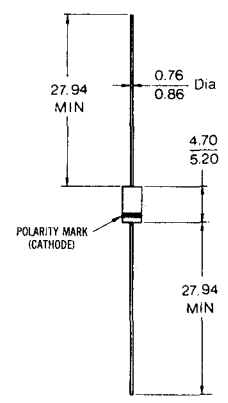
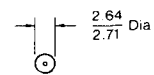


FIGURE 16—LEAD MOUNTED SILICON ZENER DIODE

Motorola Typ No.	Zener Voltage at Test Current		Zener impedance at Test Current max Ω	Test Current mA	Reverse Voltage for $I_R = 1 \mu\text{A}$ V	Max Zener Current mA	Zener Voltage Temp. Coeff. Typ. % $^\circ\text{C}$
	min	max					
MZF 2.7	2.5	2.9	80	5	—	117	-0,080
3.0	2.8	3.2	80	5	—	102	-0,075
3.3	3.1	3.5	80	5	—	91	-0,070
3.6	3.4	3.8	80	5	—	84	-0,065
3.9	3.7	4.1	80	5	—	77	-0,060
4.3	4.0	4.6	75	5	—	69	$\pm 0,055$
4.7	4.4	5.0	70	5	—	65	$\pm 0,030$
5.1	4.8	5.4	60	5	—	61	$\pm 0,030$
5.6	5.3	6.0	40	5	1,0	58	$+ 0,038$
6.2	5.8	6.6	10	5	1,0	53	$+ 0,045$
6.8	6.4	7.2	8,0	5	2,0	48	$+ 0,050$
7.5	7.1	7.9	7,0	5	2,0	44	$+ 0,058$
8.2	7.7	8.7	7,0	5	3,5	39	$+ 0,062$
9.1	8.5	9.6	10	5	3,5	36	$+ 0,068$
10	9.4	10.6	15	5	5,0	33	$+ 0,075$
11	10.4	11.6	20	5	5,0	30	$+ 0,076$
12	11.4	12.7	20	5	7,0	27	$+ 0,077$
13	12.5	14.0	25	5	7,0	24	$+ 0,079$
15	13.8	15.5	30	5	10	22,5	$+ 0,082$
16	15.3	17.0	40	5	10	20	$+ 0,083$
18	16.8	19.0	55	5	10	18	$+ 0,085$
20	18.8	21.0	55	5	10	16,5	$+ 0,086$
22	20.8	23.0	55	5	12	15	$+ 0,087$
24	22.8	25.6	80	5	12	13	$+ 0,088$
27	25.4	28.6	80	5	14	12	$+ 0,090$
30	28.4	31.6	80	5	14	10,5	$+ 0,091$
33	31.3	34.5	80	5	17	9,5	$+ 0,092$



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Dimensions in millimeters