



## Z1 type (Bidirectional only)

Figure 59

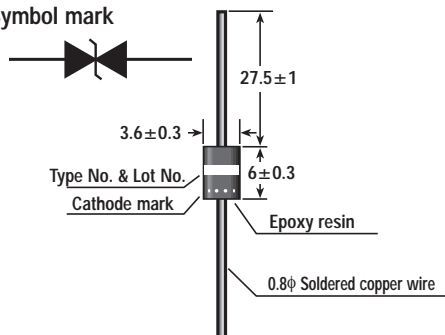
## Maximum ratings

Peak pulse power: 250 watt (10 x 1,000  $\mu$ sec)3.03 KWatt (8 x 20  $\mu$ sec)

Steady state power dissipation: 500 mWatts

Operating and storage temperature: -40°C to 150°C

## Symbol mark



Bi-polar type	Stand-off voltage  V <sub>S</sub> V	Maximum leakage current  I <sub>L</sub>	Breakdown voltage  V <sub>B</sub>	Test current  I <sub>T</sub> mA	Maximum clamping voltage &Max Maximum peak pulse current				temp. coef. of  V <sub>B</sub> %/°C
					10/1000 μsec		8/20 μsec		
					V <sub>C</sub> V	I <sub>P</sub> A	V <sub>C</sub> V	I <sub>P</sub> A	
Z1015	12.1	5	13.5–16.5	1	22.0	11.4	28.5	106	0.076
Z1018	14.5	5	16.2–19.8	1	26.5	9.43	34.4	88.0	0.079
Z1022	17.8	5	19.8–24.2	1	31.9	7.84	41.4	73.1	0.082
Z1027	21.8	5	24.3–29.7	1	39.1	6.39	50.7	59.7	0.085
Z1033	26.8	5	29.7–36.3	1	47.7	5.24	61.8	49.0	0.087
Z1039	31.6	5	35.1–42.9	1	56.4	4.43	73.1	41.4	0.090
Z1047	38.1	5	42.3–51.7	1	67.8	3.69	88.1	34.4	0.092
Z1056	45.4	5	50.4–61.6	1	80.5	3.11	104	29.1	0.094
Z1068	55.1	5	61.2–74.8	1	98.0	2.55	127	23.8	0.096
Z1082	66.4	5	73.8–90.2	1	118	2.12	153	19.8	0.099
Z1100	81.0	5	90.0–110	1	144	1.74	187	16.2	0.101
Z1120	97.2	5	108–132	1	173	1.45	224	13.5	0.103
Z1150	121	5	135–165	1	215	1.16	279	10.8	0.105

VZ  $\pm$  10% and Bi-polar

Dimensions on drawings at left are in millimeters.

## Z2 type

Figure 60

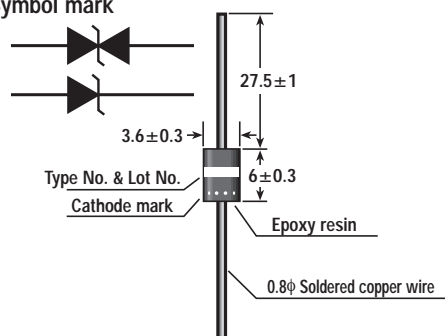
## Maximum ratings

Peak pulse power: 600 Watt (10/1,000  $\mu$ sec)7.28 KWatt (8/20  $\mu$ sec)

Steady state power dissipation: 1 Watt

Operating and storage temperature: -40°C to 150°C

## Symbol mark



Bi-polar type	Uni-polar type	Stand-off voltage $V_S$ V	Maximum leakage current $I_L$ $\mu$ A	Breakdown voltage $V_B$ V	Test current $I_T$ mA	Maximum clamping voltage & Maximum peak pulse current			
						10/1000 $\mu$ sec		8/20 $\mu$ sec	
						$V_C$ V	$I_P$ A	$V_C$ V	$I_P$ A
Z2008	Z2008U	6.63	500	7.38-9.02	10	12.5	48.0	16.2	449
Z2010	Z2010U	8.10	10	9.00-11.0	1	15.0	40.0	19.4	375
Z2012	Z2012U	9.72	5	10.8-13.2	1	17.3	34.6	22.4	325
Z2015	Z2015U	12.1	5	13.5-16.5	1	22.0	27.2	28.5	255
Z2018	Z2018U	14.5	5	16.2-19.8	1	26.5	22.6	34.4	298
Z2022	Z2022U	17.8	5	19.8-24.2	1	31.9	18.8	41.4	175
Z2027	Z2027U	21.8	5	24.3-29.7	1	39.1	15.3	50.7	143
Z2033	Z2033U	26.8	5	29.7-36.3	1	47.7	12.5	61.8	117
Z2039	Z2039U	31.6	5	35.1-42.9	1	56.4	10.6	73.1	99.5
Z2047	Z2047U	38.1	5	42.3-51.7	1	67.8	8.84	78.9	92.2
Z2056	Z2056U	45.4	5	50.4-61.6	1	80.5	7.45	104	70.0
Z2068	Z2068U	55.1	5	61.2-74.8	1	98.0	6.12	127	60.6
Z2082	Z2082U	66.4	5	73.8-90.2	1	118	5.08	153	47.5
Z2100	Z2100U	81.0	5	90.0-110	1	144	4.16	187	38.9
Z2120	Z2120U	97.2	5	108-132	1	173	3.46	224	32.5
Z2150	Z2150U	121	5	135-165	1	215	2.79	279	26.0
Z2180	Z2180U	146	5	162-198	1	258	2.32	335	21.7

Note: Nonsuffix: VZ  $\pm$  10% and Bi-polar, suffix "U": Uni-polar

Dimensions on drawings at left are in millimeters.

## Z6 type

Figure 61

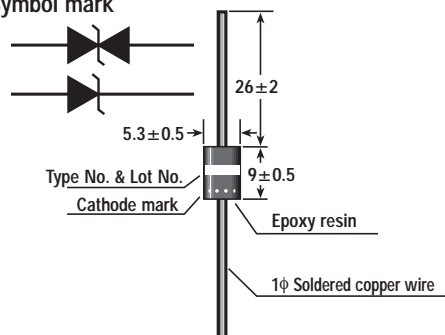
## Maximum ratings

Peak pulse power: 1.5 KWatt (10 x 1,000  $\mu$ sec)18.2 KWatt (8 x 20  $\mu$ sec)

Steady state power dissipation: 3 Watts

Operating and storage temperature: -40°C to 150°C

## Symbol mark



Bi-polar type	Uni-polar type	Stand-off voltage $V_S$ V	Maximum leakage current $I_L$ $\mu$ A	Breakdown voltage $V_B$ V	Test current $I_T$ mA	Maximum clamping voltage & Maximum peak pulse current			
						10/1000 $\mu$ sec		8/20 $\mu$ sec	
						$V_C$ V	$I_P$ A	$V_C$ V	$I_P$ A
-	Z6008U	6.63	500	7.38-9.02	10	12.5	120	16.2	1124
Z6010	Z6010U	8.10	10	9.00-11.0	1	15.0	100	19.4	938
Z6012	Z6012U	9.72	5	10.8-13.2	1	17.3	87	22.4	813
Z6015	Z6015U	12.1	5	13.5-16.5	1	22.0	68	28.5	639
Z6018	Z6018U	14.5	5	16.2-19.8	1	26.5	56	34.4	529
Z6022	Z6022U	17.8	5	19.8-24.2	1	31.9	47	41.4	440
Z6027	Z6027U	21.8	5	24.3-29.7	1	39.1	38	50.7	359
Z6033	Z6033U	26.8	5	29.7-36.3	1	47.7	31	61.8	295
Z6039	Z6039U	31.6	5	35.1-42.9	1	56.4	26	73.1	249
Z6047	Z6047U	38.1	5	42.3-51.7	1	67.8	22.2	78.9	231
Z6056	Z6056U	45.4	5	50.4-61.6	1	80.5	18.6	104	175
Z6068	Z6068U	55.1	5	61.2-74.8	1	98.0	15.3	127	143
Z6082	Z6082U	66.4	5	73.8-90.2	1	118	12.7	153	119
Z6100	Z6100U	81.0	5	90.0-110	1	144	10.4	187	97.4
Z6120	Z6120U	97.2	5	108-132	1	173	8.7	224	81.3
Z6150	Z6150U	121	5	135-165	1	215	7.0	279	65.2

Note: Nonsuffix: VZ  $\pm$  10% and Bi-polar, suffix "U": Uni-polar

Dimensions on drawings at left are in millimeters.