# Zener diodes

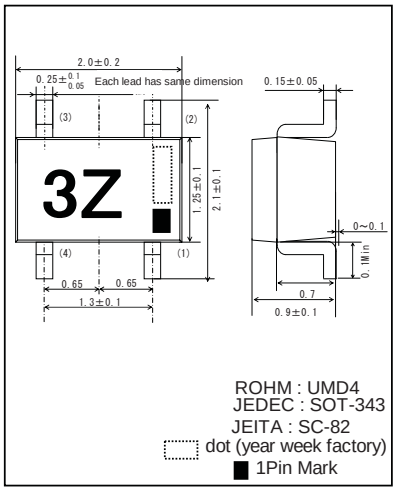
## UMZ5.6K

●**Applications**
Constant voltage control

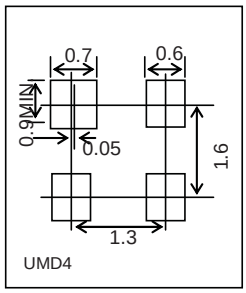
●**Features**
1) Ultra Small mold type.
(UMD4)
2) High reliability

●**Construction**
Silicon epitaxial planar

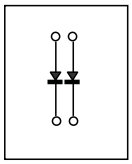
●**Dimensions** (Unit : mm)



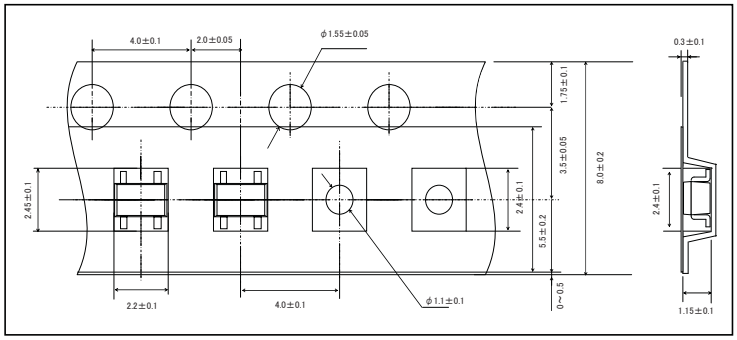

●**Land size figure** (Unit : mm)




●**Structure**



●**Taping dimensions** (Unit : mm)



●**Absolute maximum ratings** (Ta=25°C)

| Parameter | Symbol | Limits | Unit |
|---|---|---|---|
| Power dissipation | P | 200 | mW |
| Junction temperature | Tj | 150 | ℃ |
| Storage temperature | Tstg | -55 to +150 | ℃ |
| Operating temperature | Topr | -55 to +150 | ℃ |

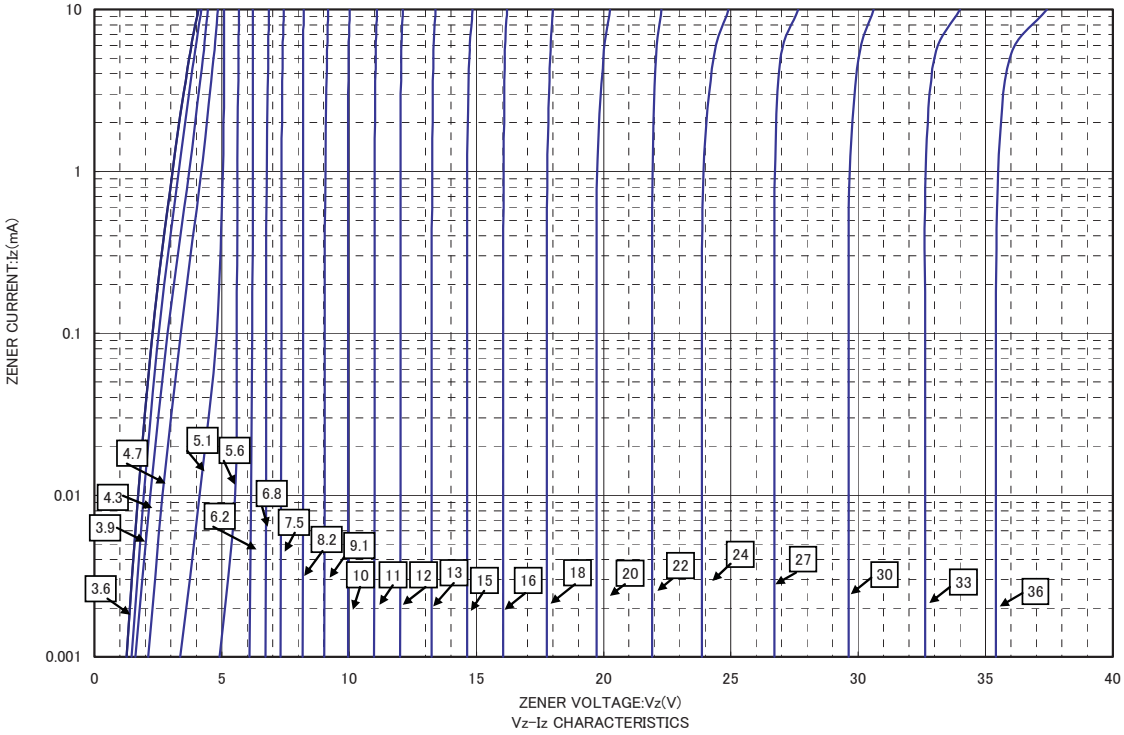
●**Electrical characteristics** (Ta=25°C)

| TYP. | Symbol | | | | |
|---|---|---|---|---|---|
| | Zener voltage : Vz(V) | | | Reverse current : IR(uA) | |
| | MIN. | MAX. | Iz(mA) | MAX. | VR(V) |
| UMZ3.6K | 3.600 | 3.845 | 5.0 | 10.0 | 1.0 |
| UMZ3.9K | 3.890 | 4.160 | 5.0 | 5.0 | 1.0 |
| UMZ4.3K | 4.170 | 4.430 | 5.0 | 5.0 | 1.0 |
| UMZ4.7K | 4.550 | 4.750 | 5.0 | 2.0 | 1.0 |
| UMZ5.1K | 4.980 | 5.200 | 5.0 | 2.0 | 1.5 |
| UMZ5.6K | 5.490 | 5.730 | 5.0 | 1.0 | 2.5 |
| UMZ6.2K | 6.060 | 6.330 | 5.0 | 1.0 | 3.0 |
| UMZ6.8K | 6.650 | 6.930 | 5.0 | 0.5 | 3.5 |
| UMZ7.5K | 7.280 | 7.600 | 5.0 | 0.5 | 4.0 |
| UMZ8.2K | 8.020 | 8.360 | 5.0 | 0.5 | 5.0 |
| UMZ9.1K | 8.850 | 9.230 | 5.0 | 0.5 | 6.0 |
| UMZ10K | 9.770 | 10.210 | 5.0 | 0.1 | 7.0 |
| UMZ11K | 10.760 | 11.220 | 5.0 | 0.1 | 8.0 |
| UMZ12K | 11.740 | 12.240 | 5.0 | 0.1 | 9.0 |
| UMZ13K | 12.910 | 13.490 | 5.0 | 0.1 | 10.0 |
| UMZ15K | 14.340 | 14.980 | 5.0 | 0.1 | 11.0 |
| UMZ16K | 15.850 | 16.510 | 5.0 | 0.1 | 12.0 |
| UMZ18K | 17.560 | 18.350 | 5.0 | 0.1 | 13.0 |
| UMZ20K | 19.520 | 20.390 | 5.0 | 0.1 | 15.0 |
| UMZ22K | 21.540 | 22.470 | 5.0 | 0.1 | 17.0 |
| UMZ24K | 23.720 | 24.780 | 5.0 | 0.1 | 19.0 |
| UMZ27K | 26.190 | 27.530 | 5.0 | 0.1 | 21.0 |
| UMZ30K | 29.190 | 30.690 | 5.0 | 0.1 | 23.0 |
| UMZ33K | 32.150 | 33.790 | 5.0 | 0.1 | 25.0 |
| UMZ36K | 35.070 | 36.870 | 5.0 | 0.1 | 27.0 |

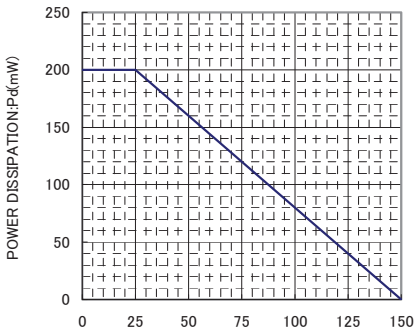
(1)The zener voltage(Vz) is measured 40ms after power is supplied.

●**MARKING (TYPE NO.)**

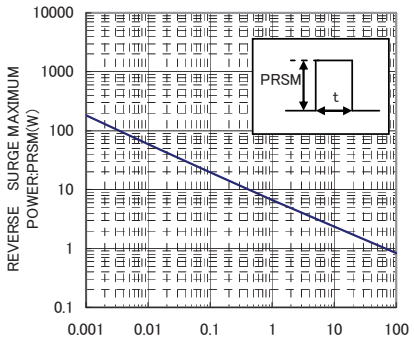
| TYPE | TYPE NO. | TYPE | TYPE NO. |
|---|---|---|---|
| UMZ 3.6K | 5U | UMZ 12K | 2L |
| UMZ 3.9K | 5V | UMZ 13K | 5B |
| UMZ 4.3K | 5W | UMZ 15K | 2M |
| UMZ 4.7K | 5X | UMZ 16K | 2N |
| UMZ 5.1K | 5Y | UMZ 18K | 2P |
| UMZ 5.6K | 3V | UMZ 20K | 2Q |
| UMZ 6.2K | 5Z | UMZ 22K | 2R |
| UMZ 6.8K | 3X | UMZ 24K | 2S |
| UMZ 7.5K | 2E | UMZ 27K | 2T |
| UMZ 8.2K | 2H | UMZ 30K | 2U |
| UMZ 9.1K | 5E | UMZ 33K | 2V |
| UMZ 10K | 3Z | UMZ 36K | 2W |
| UMZ 11K | 2K | | |



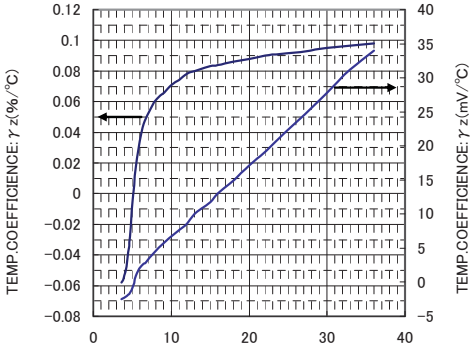
Vz-Iz CHARACTERISTICS



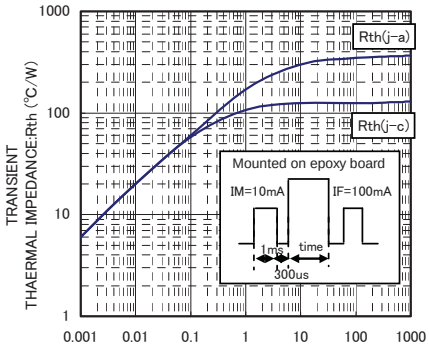
Pd-Ta CHARACTERISTICS



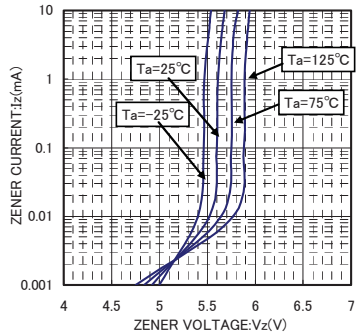
PRSM-TIME CHARACTERISTICS



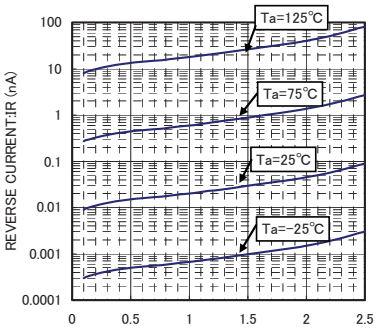
γz-Vz CHARACTERISTICS



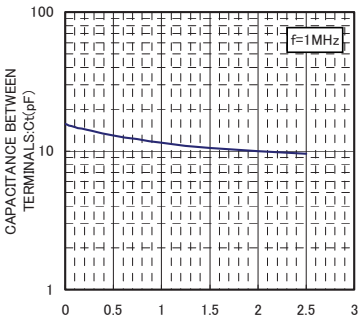
Rth-t CHARACTERISTICS



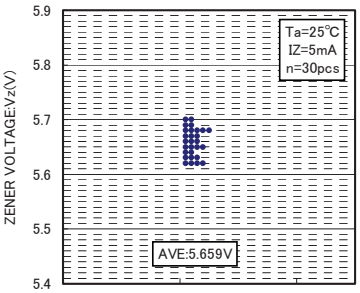

Vz-Iz CHARACTERISTICS



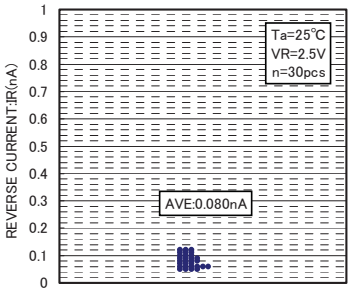

VR-IR CHARACTERISTICS



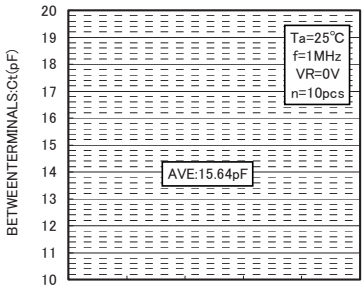

VR-Ct CHARACTERISTICS



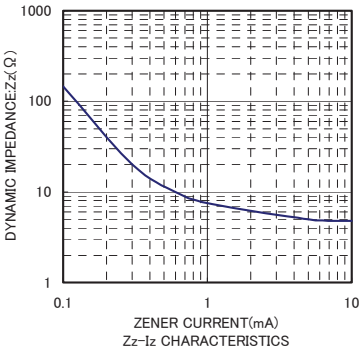

Vz DISPERSION MAP




IR DISPERSION MAP




Ct DISPERSION MAP




Zz-Iz CHARACTERISTICS

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