

# Device Modeling Report

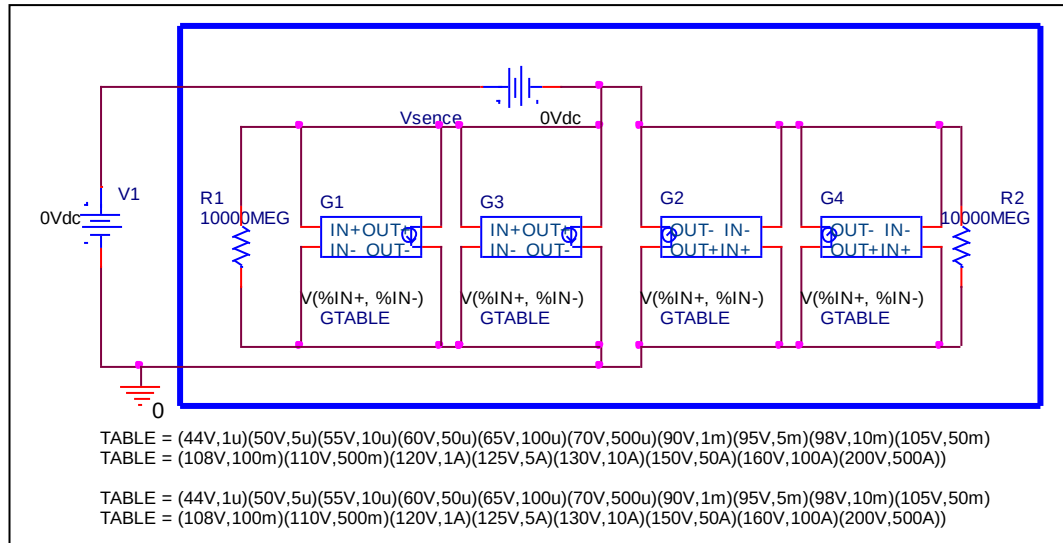
COMPONENTS: ZNR Transient/Surge Absorber  
PART NUMBER: ERZV14D820  
MANUFACTURER: Panasonic



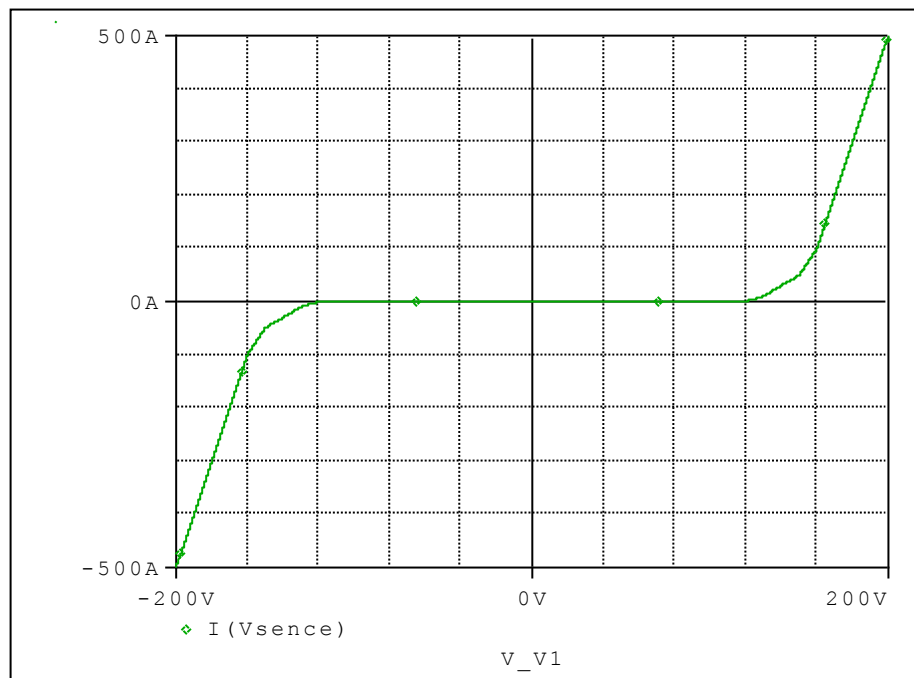
**Bee Technologies Inc.**

# ZNR Transient /Surge Absorber

## Evaluation Circuit Result



## Circuit Simulation Result



## ZNR Transient /Surge Absorber

### Simulation Result

| I(A)     | VFwd (V)    |            | %Error |
|----------|-------------|------------|--------|
|          | Measurement | Simulation |        |
| 1.00E-06 | 44.000      | 45.480     | 3.364  |
| 5.00E-06 | 50.000      | 50.990     | 1.980  |
| 1.00E-05 | 55.000      | 55.240     | 0.436  |
| 5.00E-05 | 60.000      | 60.090     | 0.150  |
| 1.00E-04 | 65.000      | 65.010     | 0.015  |
| 5.00E-04 | 70.000      | 70.030     | 0.043  |
| 1.00E-03 | 90.000      | 89.820     | 0.200  |
| 5.00E-03 | 95.000      | 94.960     | 0.042  |
| 1.00E-02 | 98.000      | 97.910     | 0.092  |
| 5.00E-02 | 105.000     | 105.000    | 0.000  |
| 1.00E-01 | 108.000     | 108.250    | 0.231  |
| 5.00E-01 | 110.000     | 111.000    | 0.909  |
| 1.00E+00 | 120.000     | 120.060    | 0.050  |
| 5.00E+00 | 125.000     | 125.000    | 0.000  |
| 1.00E+01 | 130.000     | 130.020    | 0.015  |
| 5.00E+01 | 150.000     | 150.010    | 0.007  |
| 1.00E+02 | 160.000     | 160.000    | 0.000  |
| 5.00E+02 | 200.000     | 200.000    | 0.000  |

## Comparison Graph

### Circuit Simulation Result

