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April 1st, 2010 Renesas Electronics Corporation

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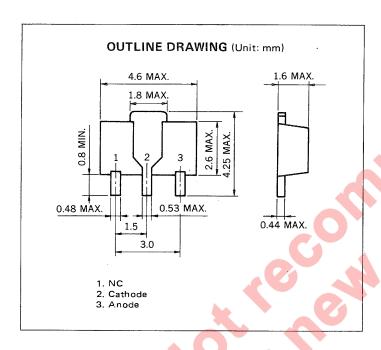


ZENER DIODES

$RD4.7P \sim RD39P$

1 W POWER MINI MOLD ZENER DIODE

NEC Type RD[] P Series are Power Mini Mold Package zener diodes possessing an allowable power dissipation of 1 watt.



FEATURES

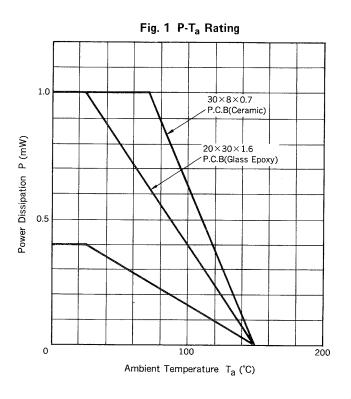
- Very small size to assure good space factor in hybrid IC applications.
- ▼ V_z; Applied E24 standard.

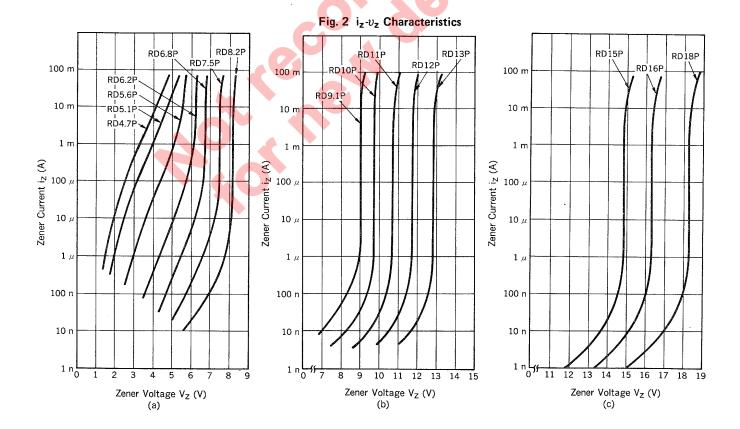
MAXIMUM RATINGS

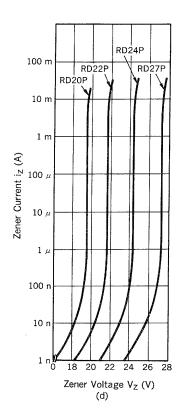
| Power Dissipation (P) | 1.0 | W |
|-----------------------|-------------------|----|
| Junction Temperatur | (T _j) | ,C |
| Storage Temperature | T_{stg}) | ,C |

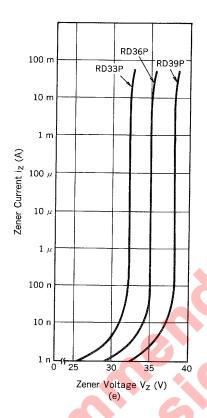
Electrical Characteristics (T $_a$ = 25 $^{\circ}$ C)

| Type Suffi Name Suffi | Suffix | Zener Voltage V _Z (V)* | | | Dynamic Impedance Z _Z (Ω)** | | Reverse Current I _R (μΑ) | |
|--------------------------|--------|--------------------------------------|------|---------------------|---|--------|--|-------------------|
| | | MIN. | MAX. | l _z (mA) | MAX. | Iz(mA) | MAX. | V _R (V |
| RD4.7P | В | 4.4 | 4.9 | 5 | 80 | 5 | 20 | 1.0 |
| RD5.1P | В | 4.8 | 5.4 | 5 | 60 | 5 | 20 | 1.0 |
| RD5.6P | В | 5.3 | 6.0 | 5 | 40 | 5 | 20 | 1.5 |
| RD6.2P | В | 5.8 | 6.6 | 5 | 10 | 5 | 20 | 3.0 |
| RD6.8P | В | 6.4 | 7.2 | 5 | 15 | 5 | 20 | 3.5 |
| RD7.5P | В | 7.0 | 7.9 | 5 | 15 | 5 | 20 | 4.0 |
| RD8.2P | В | 7.7 | 8.7 | 5 | 15 | 5 | 20 | 5.0 |
| RD9.1P | В | 8.5 | 9.6 | 5 | 15 | 5 | 20 | 6.0 |
| RD10P | В | 9.4 | 10.6 | 5 | 20 | 5 | 10 | 7.0 |
| RD11P | В | 10.4 | 11.6 | 5 | 20 | 5 | 10 | 8.0 |
| RD12P | В | 11.4 | 12.6 | 5 | 25 | 5 | 10 | 9.0 |
| RD13P | В | 12.4 | 14.1 | 5 | 30 | 5 | 10 | 10 |
| RD15P | В | 13.8 | 15.6 | 5 | 30 | 5 | 10 | 11 |
| RD16P | В | 15.3 | 17.1 | 5 | 40 | 5 | 10 | 12 |
| RD18P | В | 16.8 | 19.1 | 5 | 45 | 5 | 10 | 13 |
| RD20P | В | 18.8 | 21.2 | 5 | 55 | 5 | 10 | 15 |
| RD22P | В | 20.8 | 23.3 | 5 | 55 | 5 | 10 | 17 |
| RD24P | В | 22.8 | 25.6 | 5 | 70 | 5 | 10 | 19 |
| RD27P | В | 25.1 | 28.9 | 2 | 80 | 2 | 10 | 21 |
| RD30P | В | 28.0 | 32.0 | 2 | 80 | 2 | 10 | 23 |
| RD33P | В | 31.0 | 35.0 | 2 | 80 | 2 | 10 | 25 |
| RD36P | В | 34.0 | 38.0 | 2 | 90 | 2 | 10 | 27 |
| RD39P | В | 37.0 | 41.0 | 2 | 130 | 2 | 10 | 30 |









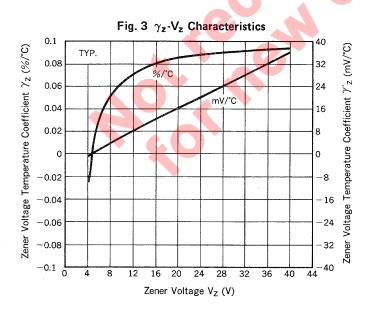
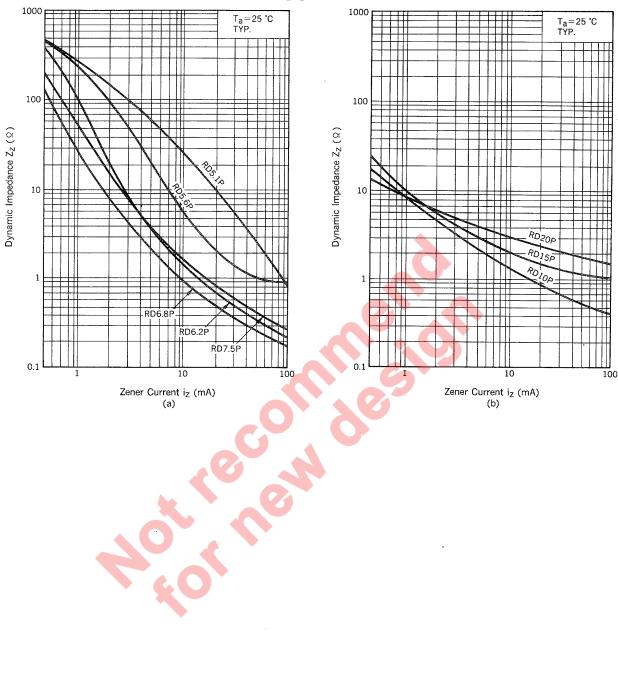


Fig. 4 Zz-Iz Characteristics





NEC Corporation

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