The RPC0402DR series of resistors offers excellent power handling capabilities and frequency response to 30GHz. The superior thermal properties of CVD diamond (high conductivity and low expansion) makes these resistors ideal for pulsed power applications. The mechanical and electrical characteristics of these chips provide a robust solution for many aerospace and military applications while its standardized production process keeps the cost competitive for commercial use.

**Features:**
- High power
- Low capacitance
- Total thin film
- Excellent pulsed power handling
- RoHS compliant

**Specifications:**
- Resistance: 50 and 100 Ohms, +/-5%
- Frequency: DC – 30 GHz
- Power: 20 Watts
- Capacitance: 0.1 pF Max
- Operating temperature: -55 °C to 150 °C
- CVD diamond substrate
- Solderable or wire bondable terminals

**Mechanical Outline**

Dimensions are in inches [mm]
The terminals of the RD0402 series can be used for soldered or wire bonding applications. The recommended attachment to heat sink is by soldering. Some de-rating needs to be applied when using epoxy as method of attachment, this de-rating depends on the thermal properties of the epoxy and technique applied. These resistors are RoHS compliant and can be offered in waffle pack or tape and reel.

**Power Rating**

![Power Rating Graph]

**Ordering Information**

<table>
<thead>
<tr>
<th>Series number</th>
<th>Size: 0402: 0.045&quot;x0.025&quot; 0603: 0.060&quot;x0.030&quot;</th>
<th>Substrate: D: CVD Diamond</th>
<th>Style: R</th>
<th>Resistance: 50</th>
<th>Tolerance: 5</th>
</tr>
</thead>
</table>

P.O. BOX 18802, Clearwater, FL 33762  
1-800-526-0704
Electro Technik Industries

Capacitive Products

Arizona Capacitors Inc.
1100 S. Plumer Avenue, Tucson, AZ 85719
tel: 520-573-0221 fax: 520-573-0520
azcapsales@electrotechnik.com
www.arizonacapacitors.com

■ Wound Film Capacitors and Electronic Filters

Custom Suppression Inc.
1100 S. Plumer Avenue, Tucson, AZ 85719
tel: 520-573-0223 fax: 520-573-0520
csssales@electrotechnik.com
www.customsuppression.com

■ Broadband, Microwave, EMI, and RFI Filters, Filtered Connectors, and Assemblies

Microwave Products

Res-Net Microwave, Inc.
P.O. Box 18802, Clearwater, FL 33762
tel: 727-530-9555 fax: 727-531-8215
res_sales_service@electrotechnik.com
www.res-netmicrowave.com

■ RF/Microwave Resistors, Attenuators, Terminations

Wavetrionix Corp
P.O. Box 18802, Clearwater, FL 33762
tel: 727-530-9555 fax: 727-531-8215
wave_sales_service@electrotechnik.com
www.wavetrionix-eti.com

■ RF/Microwave Cable Assemblies and Semi-Rigid Coaxial Cables

Resistive Products

Tepro of Florida, Inc.
P.O. Box 18802, Clearwater, FL 33762
tel: 727-796-1044 fax: 727-791-7425
tep_sales_service@electrotechnik.com
www.tepro-vamistor.com

■ Wirewound and Metal Film Resistors

Vamistor
P.O. Box 1260, Clearwater, FL 33757
tel: 727-796-1044 fax: 727-791-7425
tep_sales_service@electrotechnik.com
www.tepro-vamistor.com

■ Carbon Film and RL 42 Resistors

Magnetics Products

Hytronics Corp
P.O. Box 18802, Clearwater, FL 33762
tel: 727-535-0413 fax: 727-531-1592
hy_sales_service@electrotechnik.com
www.hytronicscorp.com

■ Power Transformers and Power Inductors

Raycom Electronics, Inc.
P.O. Box 250, 1 Raycom Rd.
Dover, PA 17315
tel: 717-292-3641 fax: 717-292-2919
raycomsales@electrotechnik.com
www.raycomelectronics.com

■ Custom Military and Avionics Magnetics

Goguen Industries
1100 S. Plumer Avenue, Tucson, AZ 85719
tel: 520-573-0221 fax: 520-573-0520
hy_sales_service@electrotechnik.com
www.goguenindustries.com

■ Specialty Inductors, Transformers, and Air Coils

Inductive Technologies, Inc. (I-Tech)
P.O. Box 18802, Clearwater, FL 33762
tel: 727-532-4459 fax: 727-531-1592
itransduction@electrotechnik.com
www.inductech.com

■ Standard Catalog Inductors and Transformers

Winatic Corp.
P.O. Box 18802, Clearwater, FL 33762
tel: 727-538-8917 fax: 727-531-1592
win_sales_service@electrotechnik.com
www.winatic.com

■ Transformers and Inductors for Medical Devices and Equipment

P.O. BOX 18802, Clearwater, FL 33762
1-800-526-0704

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