

QUALIFIED PRODUCTS LIST  
OF  
PRODUCTS QUALIFIED UNDER PERFORMANCE SPECIFICATION  
MIL-PRF-55182  
RESISTORS, FIXED, FILM, NON-ESTABLISHED RELIABILITY,  
ESTABLISHED RELIABILITY, AND SPACE LEVEL,  
GENERAL SPECIFICATION FOR

This list has been prepared for use by or for the Government in the acquisition of products covered by Specification MIL-PRF-55182. Listing of a product is not intended to and does not connote endorsement of the product by the Department of Defense. All products listed herein have been qualified under the requirements for the product as specified in the latest effective issue of the applicable specification. This list is subject to change without notice; revision or amendment of this list will be issued as necessary. The listing of a product does not release the supplier from compliance with the specification requirements.

THE ACTIVITY RESPONSIBLE FOR THIS QPL IS THE U.S. ARMY COMMUNICATIONS-ELECTRONICS COMMAND AND FORT MONMOUTH. The activity designated as agent for all contacts relative to this QPL is the Defense Supply Center Columbus (DSCC-VQ), Columbus, OH 43216-5000.

NOTES: An asterisk (\*) adjacent to the product listing indicates that qualified parts listed on the QPL are available through distributors authorized by the manufacturer in accordance with Military Standard MIL-STD-790. Names and addresses of the distributors are listed in the back of this QPL. These lists are being furnished merely as an aid in identifying authorized sources of ER parts and the responsibility for complying with contractual provisions requiring use of such parts rests with the user of such parts. Such lists have been compiled from information furnished by the manufacturers of ER parts prior to release of this QPL.

Inclusion on, or omission from, the list of a particular distributor cannot be relied upon as a guarantee of such distributor's status since the information upon which the list is based may not have been complete and since authorized distributors are subject to change by the manufacturer at any time. Inclusion of a firm on such list is not, under any circumstance, to be considered an indorsement of such firm or its products by the Department of Defense.

Per Amendment 2 of MIL-R-55182/1 and MIL-R-55182/7 a requirement was added for a one-digit code to be marked on the resistor to identify each manufacturer. The codes for the manufacturers are as follows:

| <u>COMPANY</u>       | <u>CODE</u> |
|----------------------|-------------|
| Vishay Angstrohm     | A           |
| Vishay Dale          | D           |
| IRC (Boone)          | R           |
| IRC (Corpus Christi) | C           |

| GOVERNMENT<br>DESIGNATION   | MANUFACTURER'S<br>DESIGNATION<br>OR TYPE NUMBER | TEST OR<br>QUALIFICATION<br>REFERENCE | DETAIL<br>SPECIFI-<br>CATION | MANUFACTURER'S NAME<br>(ADDRESS ON LAST PAGE) |
|---|---|---------------------------------------|------------------------------|---|
| <b>PART I</b>   |   |                                       |                              |   |
| RNC50, RNN50, RNR50*<br>Chars. H, J, and K, res. values 10.0 ohms<br>thru 0.301 megohm; res. tol. F, product<br>levels C, M, P, R, and S.   | TJ-50   | 55182-748-86                          | /7                           | IRC, Inc.                                     |
| RNC50, RNR50*<br>Chars. H, J, and K, res. values 10 ohms<br>thru 0.796 megohm; Chars. H and J, res.<br>tols. B, D and F; char. K, res. tols.<br>D and F; life failure rates M, P, R and S.  | ERC-50<br>ERC-50-31                             | 55182-1107-79<br>55182-304-87         | /7                           | Vishay Dale                                   |
| RNC51, RNR51*<br>Chars. H, J, and K, res. values 10.0 ohms<br>thru 0.200 megohm; Chars. H and J, res. tols.<br>B, D, and F; Char. K, res. tols. D and F,<br>life failure rates M, P, R and S.   | ERC50-12  | 55182-84-72                           | /11(EC)                      | Vishay Dale                                   |
| RNC55, RNN55, RNR55*<br>Chars. H, J, and K, res. values 10 ohms thru<br>1.000 megohm; chars. H and J, res. tols.<br>B, D, and F; char. K, res. tols. D and F;<br>chars. H, J, and K, res. values 1.000 megohm<br>thru 2.000 megohms; res. tol. F, product<br>levels C, M, P, R and S. | TH-55<br>TJ-55<br>TK-55                         | 55182-1226-76                         | /1                           | IRC, Inc.                                     |
| RNN55, RNR55*<br>Chars. C and E, res. values 10 ohms thru<br>301,000 ohms; res. tols. B, D and F; life<br>failure rates M, P, R and S.  | HN55<br>HS55<br>HT55<br>HY55                    | 55182-425-89                          | /1                           | Vishay Angstrohm                              |
| RNN55, RNR55*<br>Chars. C and E, res. values 24.9 ohms thru<br>1.210 megohm; res. tols. B, D and F; life<br>failure rates M, P, R and S.  | HDN55   | 55182-237-93                          | /1                           | Vishay Angstrohm                              |
| RNC55, RNR55*<br>Chars. H, J, and K, res. values 10 ohms thru<br>2.000 megohms; chars. H and J, res. tols.<br>B, D, and F; char. K, res. tols. D and F;<br>life failure rates M, P, R and S.  | ERC-55<br>ERC-55-65                             | 55182-438-81<br>55182-304-87          | /1                           | Vishay Dale                                   |
| RNC56, RNR56*<br>Chars. H, J, and K. res. values 10.0 ohms<br>thru 1.21 megohms; chars. H and J, res. tols.<br>B, D, and F; Char. K, res. tols. D and F,<br>life failure rates M, P, R, and S.  | ERC-55-91                                       | 55182-590-82                          | /12(EC)                      | Vishay Dale                                   |
| RNN57, RNR57*<br>Chars. C and E. res. values 49.9 ohms thru<br>0.200 megohm; res. tol. F; life failure<br>rates M, P, R, and S.   | HN57<br>HS57<br>HT57<br>HY57                    | 55182-45-74<br>55182-425-89           | /2                           | Vishay Angstrohm                              |
| RNC60, RNN60, RNR60*<br>Chars. H, J, and K, res. values 10 ohms thru<br>100,000 ohms; chars. H and J, res. tols.<br>B, D, and F; char. K, res. tols. D and F,<br>product levels C, M, P, R and S.   | TH-60<br>TJ-60<br>TK-60                         | 55182-1227-76<br>55182-930-75         | /3                           | IRC, Inc.                                     |
| RNN60, RNR60*<br>Chars. C and E, res. values 10.0 ohms thru<br>301,000 ohms; res. tols. B, D, and F; life<br>failure rates M, P, R and S.   | HN60<br>HS60<br>HT60<br>HY60                    | 55182-425-89                          | /3                           | Vishay Angstrohm                              |
| RNN60, RNR60*<br>Chars. C and E, res. values 305,000 ohms thru<br>2.490 megohms; res. tols. B, D, and F; life<br>failure rates M, P, R, and S.  | HS60<br>HT60<br>HY60                            | 55182-425-89                          | /3                           | Vishay Angstrohm                              |

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|---------------------------|---|---------------------------------------|------------------------------|---|
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**PART I**

|   |                              |  |     |                                       |
|---|------------------------------|--|-----|---------------------------------------|
| RNC60*<br>Chars. H, J, and K, res. values 10 ohms thru 2.000 megohms; Chars. H and J, res. tols. B, D, and F; Char. K, res. tols. D and F, life failure rates M, P, R, S; Chars. H, J and K, res. values 2.000 megohms thru 3.010 megohms, res. tols. D and F, life failure rate M. | ERC-55-200<br>ERC-55-201     | 55182-94-88<br>55182-542-88  | /3  | Vishay Dale                           |
| RNN65, RNR65*<br>Chars. C and E, res. values 24.9 ohms thru 4.99 megohms; res. tols. B, D and F; life failure rates M and P.  | HN65<br>HS65<br>HT65<br>HY65 | 55182-595-76<br>55182-425-89   | /5  | Vishay Angstrohm                      |
| RNN65, RNR65*<br>Chars. C and E, res. values 24.9 ohms thru 348,000 ohms, res. tols B, D and F; res. values 357,000 ohms thru 4.999 megohms, res. tol. F, life failure rates M and P.   | HDN65                        | 55182-124-96   | /5  | Vishay Angstrohm                      |
| RNC65, RNR65*<br>Chars. H and J, res. values 10 ohms thru 3.01 megohms, res. tols. B, D and F; char. K, res. values 10 ohms thru 3.01 megohms, res. tols. D and F; life failure rates M, P and R.   | ERC-65<br>ERC-65-65          | 55182-185-77<br>55182-304-87   | /5  | Vishay Dale                           |
| RNN70, RNR70*<br>Chars. C and E, res. values 24.9 ohms thru 4.99 megohms; res. tols. B, D, and F; life failure rates M and P.   | HN70<br>HT70<br>HS70<br>HY70 | 55182-596-76<br>55182-425-89   | /6  | Vishay Angstrohm                      |
| RNN70, RNR70*<br>Chars. C and E, res. values 24.9 ohms thru 237,000 ohms, res. tols. B, D and F; res. values 243,000 ohms thru 4.99 megohms, res. tol. F; life failure rates M and P.   | HDN70                        | 55182-124-96   | /6  | Vishay Angstrohm                      |
| RNC70, RNR70*<br>Chars. H and J, res. values 10 ohms thru 3.01 megohms, res. tols. B, D, and F; char. K, res. values 10.0 ohms thru 3.01 megohms, res. tols. D and F; life failure rates M, P, and R.   | ERC-70<br>ERC-70-4           | 55182-506-86<br>55182-304-87   | /6  | Vishay Dale                           |
| RNN75, RNR75*<br>Char. E and J, res. values 49.9 ohms thru 1.21 megohms, res. tols. B, D, and F; life failure rate M.   | HDN75                        | 55182-033-98   | /10 | Vishay Angstrohm                      |
| RNC90*<br>Char. Y, res. values 4.99 ohms thru 16.0 ohms, res. tols. B, D, and F; res. values 30.1 ohms thru 49.9k ohms, res. tols. V, T, A, B, D, and F; life failure rates M, P and R.   | S555                         | 55182-339-82<br>55182-340-82<br>55182-342-82<br>55182-1320-83<br>55182-58-90 | /9  | Vishay Resistive Systems<br>Group (1) |
| RNC90*<br>Char. Y, res. values 16.2 ohms thru 30.0 ohms, res. tols. A, B, D, and F; res. values 30.1 ohms thru 49.9k ohms, res. tols. V, T, A, B, D, and F; life failure rates M, P and R.  | S555                         | 55182-339-82<br>55182-340-82<br>55182-342-82<br>55182-1320-83<br>55182-58-90 | /9  | Vishay Resistive Systems<br>Group (1) |
| RNC90*<br>Char. Y, res. values 50.0 kohms thru 0.121 megohm, res. tols. V, T, A, B, D, F; life failure rates M, P, and R.   | S555                         | 55182-339-82<br>55182-340-82<br>55182-342-82<br>55182-1320-83<br>55182-58-90 | /9  | Vishay Resistive Systems<br>Group (1) |

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**PART I**

|  |      |                              |    |   |
|--|------|------------------------------|----|---|
| RNC90*<br>Char. Y, res. values 100 ohms thru 121,000 ohms, res. tols. A, B, D, F, and T; life failure rate M.                | MAQ  | 55182-154-98<br>55182-155-98 | /9 | Manufactured by:<br>Alpha Electronics Corp.<br>Distributed by:<br>Wilbrecht Electronics |
| RNC90*<br>Char Y, res. values 4.99 ohms thru 99.9 ohms, res. tols. A, B, D, F, and T; life failure rate M.                   | S555 | 55182-152-97                 | /9 | Vishay Resistive Systems<br>Group (2)   |
| RNC90*<br>Char. Y, res. values 100.0 ohms thru 50,000 ohms, res. tols. V, T, A, B, D, and F; life failure rates M, P, and R. | S555 | 55182-145-94                 | /9 | Vishay Resistive Systems<br>Group (2)   |
| RNC90*<br>Char. Y, res. values 50.1k ohms thru 100,000 ohms, res. tols. V, T, A, B, D, and F; life failure rate M.           | S555 | 55182-066-96                 | /9 | Vishay Resistive Systems<br>Group (2)   |
| RNC90*<br>Char Y, res. values 101 kohms thru 121 kohms, res. tols. V, T, A, B, D, and F; life failure rates M, P and R.      | S555 | 55182-152-97                 | /9 | Vishay Resistive Systems<br>Group (2)   |

**PART II**

The following products listed herein are reciprocal listings based on the NATO Standardization Agreement (STANAG) 4093 or International Standardization Agreements.

These devices are listed in the QPL of the concerned nation and, according to the qualifying authority of that nation, the devices meet the requirements for such listing. The products were completely manufactured, assembled, and tested in the concerned nation in accordance with the requirements of that nation. No review has been made by our qualifying activity of the manufacturing or test facilities or test report. Furthermore, no determination of equivalency has been conducted.

NOTE: No devices listed are to be JAN branded or marked with the failure rate level but should be marked with the appropriate national part numbers and identifiers, as applicable.

| NATIONAL DEVICE<br>SPECIFICATION  | NATIONAL DEVICE<br>SPECIFICATION | NATIONAL QPL | TEST REPORT<br>NUMBER               | MANUFACTURER'S NAME<br>AND ADDRESS  |
|---|----------------------------------|--------------|-------------------------------------|---|
| RNC50<br>Char. H, res. values 47 ohms Bis<br>150 K ohms, res. tols. D and F.  | 396                              | VG 95 212    | 6656-4750-<br>1002/A4K<br>4 Apr 80  | Roederstein<br>Ludmillastrabe 23/25<br>Postfach 588/589<br>D-8300 Landshut/Bayern<br>West Germany |
| RNC55<br>Char. H, res. values 10 ohms Bis<br>1 megohm, res. tols. B, D and F. | 396                              | VG 95 212    | 6656-4750-<br>1002/A4K<br>14 Apr 80 | Roederstein   |
| RNC60<br>Char. H, res. values 10 ohms Bis<br>1 megohm, res. tols. B, D and F. | 397                              | VG 95 212    | 6656-4750-<br>1002/A7K<br>11 Apr 83 | Roederstein   |

| MANUFACTURER'S NAME, ADDRESS<br>AND PLANT  | CAGE<br>CODE       |
|--|--------------------|
| Alpha Electronics Corp.<br>3K Building, 2-4-7 Kajicho<br>Chiyoda-ku, Tokyo<br>Japan 101-0044<br>Plant: Nakatashiro, Ouchimachi<br>Yurigun, Akita<br>Japan 018-09               | SB481              |
| <u>Category C Distributor</u><br>Wilbrecht Electronics, Inc.<br>1400 Energy Park Drive, Suite 18<br>St. Paul, MN 55108-5248<br>Plant: 155 Waibel Drive N.E.<br>Huron, SD 57530 | 1FDC3<br><br>OKUU5 |
| IRC, Inc.<br>International Resistive Company<br>P.O. Box 1860<br>Boone, NC 28607<br>Plant: 736 Greenway Road<br>Boone, NC 28607  | 11502              |
| Vishay Angstrohm<br>18400 Precision Place<br>Hagerstown, MD 21742<br>Plant: Same Address   | 17745              |
| Vishay Dale<br>1122 23rd Street<br>P.O. Box 609<br>Columbus, NE 68601-3647<br>Plants: 2300 Riverside Blvd.<br>Norfolk, NE  | 91637              |
| Vishay Resistive Systems Group<br>63 Lincoln Highway<br>Malvern, PA 19355<br>Plants: 1. Same Address<br>2. Vishay Israel, Ltd.<br>2 Ha'ofan Street<br>Holon 58125, Israel      | 18612              |

AUTHORIZED ER DISTRIBUTORS: (Category A unless otherwise specified)

|                         |                   |                        |                           |
|-------------------------|-------------------|------------------------|---------------------------|
| MANUFACTURER: IRC, Inc. | IRC, Inc.         | IRC, Inc.              | IRC, Inc.                 |
| Greenway Road           | Route 181         | 401 North Broad Street | 4222 South Staples Street |
| Boone, NC 28607         | Newland, NC 28657 | Philadelphia, PA 19108 | Corpus Christi, TX 78411  |

\* NS - (NON-STOCKING: NORMALLY DOES NOT STOCK PARTS IN QUANTITY)

Bell Industries  
1401 S. Lindon Lane  
Tempe, AZ 85281

Bell Industries  
3433 East Washington Boulevard  
Fort Wayne, IN 46803

Bell Industries  
30101 Aquora Court  
Aquora Hills, CA 91301

Bell Industries  
5230 West 79th Street  
P.O. Box 6885  
Indianapolis, IN 46268

Bell Industries  
11095-D Knott Avenue  
Cypress, CA 90630

Bell Industries  
Micro-Mil Division  
446 Windsor Park Drive  
Dayton, OH 45459

Bell Industries  
306 East Alondra Boulevard  
Gardena, CA 92048

Bell Industries  
6024 Southwest Jean Road  
Lake Oswego, OR 97034

Bell Industries  
11812 San Vicente Blvd., Suite 300  
Los Angeles, CA 90049

Bell Industries  
1701 Greenville, Suite 306  
Richardson, TX 75081

Bell Industries  
4311 Anthony Court, #100  
Rocklin, CA 95677

Bell Industries  
6912-B South 185, W.  
Midvale, UT 84047

Bell Industries  
7827 Convoy Court, #403  
San Diego, CA 92111

Bell Industries  
226 N. 900 Eastmound Drive  
Waukesha, WI 53186

Bell Industries  
15120 Marquardt Avenue  
Santa Fe Springs, CA 90670

C & D Electronics  
90 Carando Drive  
Springfield, MA 01104

Bell Industries  
1161 North Fairoaks Avenue  
Sunnyvale, CA 94086

Capstone  
1180 Murphy Avenue  
San Jose, CA 95131

Bell Industries  
12421 West 49th Avenue  
Wheatridge, CO 80033

Capstone  
2961 Dow Avenue  
Tustin, CA 92680

Bell Industries  
600 South North Lake Blvd., Suite 400  
Altamonte Springs, FL 32701

Capstone  
3254 Fraser Street  
Aurora, CO 80011

Bell Industries  
638 South Military Trail  
Deerfield Beach, FL 33442

Capstone  
1100 West Thorndale Avenue  
Itasca, IL 60143

Bell Industries  
3020-A Business Park Drive  
Norcross, GA 30071

Capstone  
25 Upton Drive  
Wilmington, MA 01887

Bell Industries  
870 Cambridge  
Elk Grove Village, IL 60007

MANUFACTURER: IRC, Inc. (Continued)

Capstone  
5230 Green's Dairy Road  
Raleigh, NC 27604

Jaco Electronics \*  
2282 Townsgate Road  
Westlake Village, CA 91361

Capstone  
500 Fellowship Road  
Mt. Laurel, NJ 08054

Jaco Electronics  
384 Pratt Street  
Meriden, CT 06450

Capstone  
500 Horseblock Road  
Brookhaven, NY 11719

Jaco Electronics  
1202 Tech Boulevard, Suite 200-A  
Tampa, FL 33619

Capstone  
3220 Commander Drive  
Carrollton, TX 75006

Jaco Electronics  
6035-J Atlantic Boulevard  
Norcross, GA 30071

Dee Electronics \*  
2500 16th Avenue SW  
Cedar Rapids, IA 51406

Jaco Electronics/QC  
1053 East Street  
Tewksbury, MA 01876

E M C  
1945 I-85 South  
Charlotte, NC 28208

Jaco Electronics  
10270 Old Columbia  
Columbia, MD 20144

E M C \*  
1150 West Third Ave.  
Columbus, OH 43212

Jaco Electronics  
3029-107 Stonybrook Drive  
Raleigh, NC 27604

E M C  
14 Alpha Park  
Highland Heights, OH 44143

Jaco Electronics \*  
145 Oser Avenue  
Hauppauge, L.I., NY 11787 (Category B)

E M C  
4660 Gateway Circle  
Kettering, OH 45440

Jaco Electronics/QC  
3158 S. 108 East Avenue, Suite 274  
Tulsa, OK 74146

Future Electronics  
239 Hymus Boulevard  
Pointe Claire, Quebec, Canada H9R 5C7

Jaco Electronics/QC  
4257 Kellway Circle  
Addison, TX 75244

Gerber Electronics \*  
128 Carnegie Row  
Norwood, MA 02062

Jaco Electronics/QC  
2120-M Braker Lane  
Austin, TX 78758

Jaco/Distel, Inc.  
23-441 South Point Drive  
Laguna Hills, CA 92655

Jaco Electronics/QC  
1005 Industrial Boulevard  
Sugarland, TX 77478

Jaco/Distel, Inc.  
2880 Zanker Road, Suite 202  
San Jose, CA 95134

Justin Electronics \*  
3300 Highway 421 North  
Wilmington, NC 28402 (Category B)

Jaco/Distel, Inc.  
15014 N.E. 40th Street  
Bldg. O, Unit 202  
Redmond, WA 98052

MS Electronics  
8031 Cessna Avenue  
Gaithersburg, MA 20879

MANUFACTURER: IRC, Inc. (Continued)

Marsh Electronics \*  
1563 South 101th Street  
Milwaukee, WI 53214

Neumann Electronics \*  
7964-C Arjons Drive  
San Diego, CA 92126

Newark Electronics \*  
4801 N. Ravenswood  
Chicago, IL 60640

New Yorker Electronics  
1103 W. Hibiscus Boulevard  
Melbourne, FL 32901

New Yorker Electronics \*  
420 Center Avenue  
Mamaroneck, NY 10543

OHM/Resource \*  
746 Vermont Street  
Palatine, IL 60067

Passive Components, Inc. \*  
21113 Superior Street  
Chatsworth, CA 91311

Projections Unlimited  
14831 Myford Road  
Tustin, CA 92680

Radar Electric \*  
168 Western Avenue, W.  
Seattle, WA 98119

RepcO Electronics, Inc. \*  
6561 Cochran Road  
Solon, OH 44139

Resco/Baltimore \*  
4961 Mercantile Road  
Baltimore, MD 21236

Schuten Electronics \*  
4815 Butterfield Road  
Hillside, IL 60162

Spirit Electronics \*  
7819 East Greenway, Suite 9  
Scottsdale, AZ 85269

Summit Electronics \*  
916 Main Street  
Buffalo, NY 14202

Summit Electronics  
292 Commerce Drive  
Rochester, NY 14623



AUTHORIZED ER DISTRIBUTORS: (Category A unless otherwise specified)

MANUFACTURER: Vishay Angstrohm  
18400 Precision Place  
Hagerstown, MD 21742

\* NS - (NON-STOCKING: NORMALLY DOES NOT STOCK PARTS IN QUANTITY)

C & D Electronics \*  
3010 W. Gandy Blvd., Suite 12  
Tampa, FL 33611

Jaco Electronics  
3029-107 Stonybrook Drive  
Raleigh, NC 27604

C & D Electronics \*  
90 Carando Drive  
Springfield, MA 01104

Jaco Electronics  
145 Oser Avenue  
Hauppauge, L.I., NY 11787

Command Electronics \*  
42 Central Drive  
Farmingdale, L.I., NY 11735

Jaco Electronics \*  
3247 Kellway Circle  
Addison, TX 75224

Vishay Dale  
2300 Riverside Boulevard  
Norfolk, NE 68701  
(NOTE: Category B)

L & S Electronics \*  
139 N. Central Avenue  
Valley Stream, NY 11580

G & A Sales \*  
P.O. Box 39398  
2854 Blue Rock Road  
Cincinnati, OH 45239

L & S Electronics \*  
21 Burns Lane  
Charleston, SC 29481

Jaco Electronics \*  
23-441 South Point Drive, Suite 140  
Laguna Hills, CA 92653

MMG Electronics/L & S \*  
8831 49th Street N.  
Pinellas Park, FL 34665

Jaco Electronics \*  
2880 Zanker Road Suite 202  
San Jose, CA 95134

Mast Distributors, Inc. \*  
710 Union Parkway  
Ronkonkoma, NY 11779

Jaco Electronics \*  
2260 Townsgate Road  
Westlake Village, CA 91361

Micro Mil Division \*  
446 Windsor Park Drive  
Dayton, OH 45459

Jaco Electronics \*  
384 Pratt Street  
Meriden, CT 06450

Petell/Passive Components, Inc. \*  
21113 Superior Street  
Chatsworth, CA 91311

Jaco Electronics \*  
1060 Holland Drive  
Boca Raton, FL 33487

Passive Components, Inc. \*  
1590 Oakland Road  
San Jose, CA 95131

Jaco Electronics \*  
2102 Tech Boulevard  
Tampa, FL 33519

RESCO/Baltimore  
4961 Mercantile Road  
Baltimore, MD 21236

Jaco Electronics  
1053 East Street  
Tewksbury, MA 01876

RESCO/Washington \*  
10523 Ewing Road  
Beltsville, MD 20705

Jaco Electronics  
10270-F Old Columbia Road  
Columbia, MD 21046

Kent Electronics, Inc. \*  
549 S. 48th Street, Suite 104  
Tempe, AZ 85281

Kent Electronics, Inc. \*  
9760 Owensmouth Avenue  
Chatsworth, CA 91311

MANUFACTURER: Vishay Angstrom (Continued)

|   |   |   |   |
|---|---|---|---|
| Kent Electronics, Inc.<br>6195 Cornerstone Court East<br>San Diego, CA 92121            | * | T.T.I., Inc.<br>1535 McCandless Dr., Bldg. 11<br>Milipitas, CA 95035              | * |
| Kent Electronics, Inc.<br>1520 Montague Expressway<br>San Jose, CA 95131                | * | T.T.I., Inc.<br>10200 Sepulveda Blvd., Suite 380<br>Mission Hills, CA 91345       | * |
| Kent Electronics, Inc.<br>1500 West Hampden, Bldg. 4<br>Englewood, CO 80110             | * | T.T.I., Inc.<br>13220 Evening Creek Drive, S.<br>San Diego, CA 92128              | * |
| Kent Electronics, Inc.<br>9280 Bay Plaza Boulevard<br>Tampa, FL 33619-9627              | * | T.T.I., Inc.<br>1570 Brookhollow, Suite 103<br>Santa Ana, CA 92705                | * |
| Kent Electronics, Inc.<br>5300 N. Park Place, N.E., Suite 110<br>Cedar Rapids, IA 52402 | * | T.T.I., Inc.<br>6800 N. Broadway, Suite 107<br>Denver, CO 80221                   | * |
| Kent Electronics, Inc.<br>2190 N. Gladstone Court<br>Glendale Heights, IL 60139         | * | T.T.I., Inc.<br>8 Fairfield Boulevard<br>Wallingford, CT 06492                    | * |
| Kent Electronics, Inc.<br>21 Alpha Road<br>Chelmsford, MA 01824                         | * | T.T.I., Inc.<br>6220 South Orange Blossom Trail<br>Suite 516<br>Orlando, FL 32809 | * |
| Kent Electronics, Inc.<br>2515 Wabash Avenue<br>St. Paul, MN 55114 (Category B)         | * | T.T.I., Inc.<br>2979-A Pacific Drive<br>Norcross, GA 30071                        | * |
| Kent Electronics, Inc.<br>5494 Brown Road<br>Hazelwood, MO 63042                        | * | T.T.I., Inc.<br>100 Research Drive<br>Wilmington, MA 01887                        | * |
| Kent Electronics, Inc.<br>3121-B South Dodgion<br>Independence, MO 64055                | * | T.T.I., Inc.<br>6420 Dobbin Road<br>Columbia, MD 21045                            | * |
| Kent Electronics, Inc.<br>1727 North Ocean Avenue<br>Medford, NY 11763                  | * | T.T.I., Inc.<br>12301 Whitewater Drive<br>Minnetonka, MN 55343                    | * |
| Kent Electronics, Inc.<br>15209 N.E. 95th<br>Redmond, WA 98052                          | * | T.T.I., Inc.<br>5500-77 Center Drive<br>Charlotte, NC 28217                       | * |
| Texas Components Corp.<br>1716 W. Sam Houston Parkway<br>Houston, TX 77043              | * | T.T.I., Inc.<br>100 Century Parkway, Suite 120<br>Mt. Laurel, NJ 08054            | * |
| T.T.I., Inc.<br>4625 S. Wendler Drive, Suite 108<br>Tempe, AZ 85282                     | * | T.T.I., Inc.<br>921 South Second Street<br>Ronkonkoma, NY 11779                   | * |

MANUFACTURER: Vishay Angstrom (Continued)

T.T.I., Inc. \*  
670-A Lakeview Plaza Boulevard  
Columbus, OH 43085

T.T.I., Inc. (HQ)  
2441 Northeast Parkway  
Fort Worth, TX 76101-1896 (Category B)

T.T.I., Inc. \*  
7539 Airport Freeway  
Fort Worth, TX 76118

T.T.I. International  
4096 Sandshell Drive  
Fort Worth, TX 76137

T.T.I., Inc. \*  
9577 N.E. 153rd Avenue  
Redmond, WA 98052

AUTHORIZED ER DISTRIBUTORS: Category A (unless otherwise specified)

MANUFACTURER: Vishay Angstrohm  
One Precision Place  
Hagerstown, MD 21740

DISTRIBUTOR: Vishay Dale  
P.O. Box 609  
Columbus, NB 68601

\* NS - (NON-STOCKING: NORMALLY DOES NOT STOCK PARTS IN QUANTITY)

Acacia/Deanco Electronics  
16592 Milliken Avenue  
Irvine, CA 92714

Pioneer/Standard  
4800 East 131st. Street  
Cleveland, OH 44105

Acacia/Deanco Electronics  
1288 Hammerwood Avenue  
Sunnyvale, CA 94086

Pioneer/Standard  
P.O. Box 291  
Dayton, OH 45404

Bell Industries,  
Electronic Distributor Division  
515 Busse Road  
Elk Grove Village, IL 60007

Resco/Baltimore  
4961 Mercantile Road  
Baltimore, MD 21236

Command Electronics Corp.  
42 Central Dr.  
Farmingdale, NY 11725

Stotts-Friedman Company, Inc.  
2600 East River Road  
Dayton, OH 45439

Dee Electronics  
2500 16th Avenue, SW.  
Cedar Rapids, IA 52406

Summit Distributors  
916 Main Street  
Buffalo, NY 14202

Fairmont Electronic Sales Corp.  
295 Oser Avenue  
Hauppauge, NY 11787

T. T. I., Inc.  
10200 Sepulveda Boulevard  
Mission Hills, CA 91345

Hamilton/Avnet  
620 North Industry Drive  
Oxford, NC 27565

T. T. I., Inc.  
1570 Brookhollow, Suite 103  
Santa Ana, CA 92705

Kent Electronics, Inc.  
9760 Owensmouth Avenue  
Chatsworth, CA 91311

T. T. I., Inc.  
670-A Lakeview Plaza Boulevard  
Columbus, OH 43085

Kent Electronics, Inc.  
4040 Sorrento Valley Road  
San Diego, CA 92121

T. T. I., Inc.  
4033 East Belknap  
Fort Worth, TX 76111

Kent Electronics, Inc.  
1520 Montague Expressway  
San Jose, CA 95131

Waco Electronics  
4900 Monaco Parkway  
Commerce City, CO 80022

Kent Electronics, Inc.  
2515 Wabash Avenue  
St. Paul, MN 55114

L & S Electronics Inc.  
139 North Central Avenue  
Valley Stream, L.I., NY 11580

Mayer Electronics Company  
34 Linnell Circle  
Billerica, MA 01821

AUTHORIZED ER DISTRIBUTORS: (Category A unless otherwise specified)

MANUFACTURER: Vishay Dale  
1122 23rd Street, P.O. Box 609  
Columbus, NE 68602-0609

\* NS - (NON-STOCKING: NORMALLY DOES NOT STOCK PARTS IN QUANTITY)

Arrow Electronics/PEMCO Group  
2900 Westchester Avenue, Suite 401  
Purchase, NY 10577-2508

Avnet EMG  
60 S. McKemy  
Chandler, AZ 85226

Bell Industries  
EDD Dayton Division  
446 Windsor Park Drive  
Dayton, OH 45459

Future Electronics  
237 Hymus Boulevard  
Pointe Claire, Quebec  
Canada H9R 5C7

Jaco Electronics, Inc.  
145 Oser Avenue  
Hauppauge, NY 11788

Kent Electronics, Inc.  
7433 Harwin Drive  
Houston, TX 77036-2015

Loras Industries, Inc.  
2640 Freewood Drive  
Dallas, TX 75220  
(NOTE: Category B-Hot Solder Dip Only  
39007, 39009, 39017, 55182)

New Yorker Electronics Co., Inc.  
420 Center Aenue  
Mamaroneck, NY 10543

Pioneer Standard Electronics  
4800 E. 131 Street  
Cleveland, OH 45105

T.T.I., Inc.  
2441 Northeast Parkway  
Fort Worth, TX 76101-1896  
(NOTE: Category B - MIL-R-55182 only)

Tri-Start Electronics, Inc.  
134 Remington Boulevard  
Ronkonkoma, NY 11779

AUTHORIZED ER DISTRIBUTORS: (Category A unless otherwise specified)

MANUFACTURER: Vishay Resistive Systems Group  
 63 Lincoln Highway  
 Malvern, PA 19355

\* NS - (NON-STOCKING: NORMALLY DOES NOT STOCK PARTS IN QUANTITY)

|   |   |  |   |
|---|---|--|---|
| Bell Industries<br>555 Sparkman Drive, Suite 600D<br>Huntsville, AL 35816               | * | Bell Industries<br>525 Airport North Office Park<br>Fort Wayne, IN 46825         | * |
| Bell Industries<br>10611 N. Hayden Road, Suite D-103<br>Scottsdale, AZ 85260            | * | Bell Industries<br>P.O. Box 6885<br>Indianapolis, IN 46268-0885                  | * |
| Bell Industries<br>30101 Aquora Court, Suite 118<br>Aquora Hills, CA 91301              | * | Bell Industries<br>100 Burt Road, #106<br>Andover, MA 01810                      | * |
| Bell Industries<br>220 Technology Drive, Suite 100<br>Irvine, CA 92718                  | * | Bell Industries<br>8945 Guilford Road, #130<br>Columbia, MD 21046-1409           | * |
| Bell Industries<br>11812 San Vicente Blvd., Suite 300<br>Los Angeles, CA 90049          | * | Bell Industries<br>271 Route 46 W., Suites F202-203<br>Fairfield, NJ 07004       | * |
| Bell Industries<br>3001 Douglas Boulevard, Suite 205<br>Roseville, CA 95661             | * | Bell Industries<br>158 Gaither Drive, Suite 110<br>Mt. Laurel, NJ 08054          | * |
| Bell Industries<br>5520 Ruffin Road, #103<br>San Diego, CA 92123-1320                   | * | Bell Industries<br>11728 Linn, N.E.<br>Albuquerque, NM 87123                     | * |
| Bell Industries<br>15200 Marquardt Avenue<br>Santa Fe Springs, CA 90670                 | * | Bell Industries<br>444 Windsor Park Drive<br>Dayton, OH 45459                    | * |
| Bell Industries<br>1161 North Fairoaks Avenue<br>Sunnyvale, CA 94086                    | * | Bell Industries<br>31200 Solon Road, Suite 12<br>Solon, OH 44139                 | * |
| Bell Industries<br>9351 Grant Street, Suite 460<br>Thornton, CO 80229                   | * | Bell Industries<br>9275 S.W. Nimbus Avenue<br>Beaverton, OR 97005-7132           | * |
| Bell Industries<br>1064 E. Main Street<br>Meridan, CT 06450                             | * | Bell Industries<br>1701 Greeneville, Suite 306<br>Richardson, TX 75081           | * |
| Bell Industries<br>650 South North Lake Blvd., Suite 400<br>Altamonte Springs, FL 32701 | * | Bell Industries<br>6912 S. 185 West, Suite B<br>Midvale, UT 84047                | * |
| Bell Industries<br>3000-D Business Park Drive<br>Norcross, GA 30071                     | * | Bell Industries<br>1715 114th Avenue, S.E., Suite 208<br>Bellevue, WA 98004      | * |
| Bell Industries<br>870 Cambridge<br>Elk Grove Village, IL 60007-2437                    | * | Hamilton Hallmark<br>4890 University Drive, Suite 1<br>Huntsville, AL 35805-6229 | * |

MANUFACTURER: Vishay Resistive Systems Group (Continued)

|  |   |   |   |
|--|---|---|---|
| Hamilton Hallmark<br>4637 South 36th Place<br>Phoenix, AZ 85040                        | * | Hamilton Hallmark<br>3425 Corporate Way, Suites A & G<br>Duluth, GA 30136           | * |
| Hamilton Hallmark<br>1626 S. Edward Drive<br>Tempe, AZ 85281                           | * | Hamilton Hallmark<br>1130 Thorndale Avenue<br>Bensenville, IL 60106                 | * |
| Hamilton Hallmark<br>7400 N. Oracle Street<br>Tucson, AZ 85704                         | * | Hamilton Hallmark<br>655 W. Carmel Drive, Suite 160<br>Carmel, IN 46032             | * |
| Hamilton Hallmark<br>3170 Pullman Street<br>Costa Mesa, CA 92626                       | * | Hamilton Hallmark<br>10809 Lakeview Drive<br>Lenexa, KS 66215                       | * |
| Hamilton Hallmark<br>P.O. Box 2647<br>Culver City, CA 90230                            | * | Hamilton Hallmark<br>1847-G Mercer Road<br>Lexington, KY 40511                      | * |
| Hamilton Hallmark<br>580 Menlo Drive, Suite 2<br>Rocklin, CA 95677                     | * | Hamilton Hallmark<br>10-D Centennial Drive<br>Peabody, MA 01960                     | * |
| Hamilton Hallmark<br>4545 Viewridge Avenue<br>San Diego, CA 92123                      | * | Hamilton Hallmark<br>7134 Columbia Gateway Circle<br>Columbia, MD 21046-2101        | * |
| Hamilton Hallmark<br>2105 Lundy Avenue<br>San Jose, CA 95131                           | * | Hamilton Hallmark<br>44191 Plymouth Oaks Blvd.<br>Plymouth, MI 48170                | * |
| Hamilton Hallmark<br>21150 Califa Street<br>Woodland Hills, CA 91367                   | * | Hamilton Hallmark<br>9401 James Avenue S., Suite 140<br>Bloomington, MN 55431       | * |
| Hamilton Hallmark<br>710 Wooten Road, Suite 28<br>Colorado Springs, CO 80915           | * | Hamilton Hallmark<br>3783 Rider Trail, S.<br>Earth City, MO 63045                   | * |
| Hamilton Hallmark<br>12503 E. Euclid Drive, Suite 20<br>Englewood, CO 80111            | * | Hamilton Hallmark<br>5234 Green's Dairy Road<br>Raleigh, NC 27604                   | * |
| Hamilton Hallmark<br>125 Commerce Court, Unit 6<br>Cheshire, CT 06410                  | * | Hamilton Hallmark<br>1 Keystone Avenue, Bldg. 36<br>Cherry Hill, NJ 08003           | * |
| Hamilton Hallmark<br>3350 N.W. 53rd Street, Suites 105-107<br>Ft. Lauderdale, FL 33309 | * | Hamilton Hallmark<br>10 Lanidex Plaza West<br>Parsippany, NJ 07054-2715             | * |
| Hamilton Hallmark<br>10491 72nd Street, N.<br>Largo, FL 34647                          | * | Hamilton Hallmark<br>7801 Academy Road, Bldg. 1, Suite 102<br>Albuquerque, NM 87109 | * |
| Hamilton Hallmark<br>7079 University Boulevard<br>Winter Park, FL 32792                | * | Hamilton Hallmark<br>390 Rabro Drive<br>Hauppauge, NY 11788                         | * |

MANUFACTURER: Vishay Resistive Systems Group (Continued)

|   |   |   |   |
|---|---|---|---|
| Hamilton Hallmark<br>1057 Henrietta Road<br>Rochester, NY 14623             | * | Jaco Electronics<br>1610-A Berryessa Road<br>San Jose, CA 95134                 | * |
| Hamilton Hallmark<br>7760 Washington Village Drive<br>Dayton, OH 45459      | * | Jaco Electronics<br>1541-A Parkway Loop<br>Tustin, CA 92680                     | * |
| Hamilton Hallmark<br>5821 Harper Road<br>Solon, OH 44139                    | * | Jaco Electronics<br>2282 Townsgate Road, Suite 100<br>Westlake, CA 91316        | * |
| Hamilton Hallmark<br>777-L Dearborn Park Lane<br>Worthington, OH 43085      | * | Jaco Electronics<br>P.O. Box 471<br>Erie, CO 80516                              | * |
| Hamilton Hallmark<br>12606 E. 51st Street<br>Tulsa, OK 74147                | * | Jaco Electronics<br>9900 West Sample Road, Suite 404<br>Coral Springs, FL 33065 | * |
| Hamilton Hallmark<br>9750 S.W. Nimbus Avenue<br>Beaverton, OR 97005-7132    | * | Jaco Electronics<br>593 Learning Court<br>Lawrenceville, GA 30244               | * |
| Hamilton Hallmark<br>12211 Technology Boulevard<br>Austin, TX 78759         | * | Jaco Electronics, Inc.<br>1053 East Street<br>Tewksbury, MA 10876               | * |
| Hamilton Hallmark<br>11420 Pagemill Drive<br>Dallas, TX 75243               | * | Jaco Electronics<br>10270-F Old Columbia Road<br>Columbia, MD 21046             | * |
| Hamilton Hallmark<br>11-A Founders Boulevard<br>El Paso, TX 79906           | * | Jaco Electronics<br>10340 Viking Drive, Suite 115<br>Eden Prairie, MN 55344     | * |
| Hamilton Hallmark<br>1406 N. 28th Street, Suite 105<br>Harlingen, TX 78550  | * | Jaco Electronics<br>5206 Green's Dairy Road<br>Raleigh, NC 27604-4612           | * |
| Hamilton Hallmark<br>8000 Westglen<br>Houston, TX 77063                     | * | Jaco Electronics<br>145 Oser Avenue<br>Hauppauge, NY 11787                      | * |
| Hamilton Hallmark<br>1100 E. 6600 S., Suite 120<br>Salt Lake City, UT 84121 | * | Jaco Electronics<br>4900 S.W. Griffith Drive, Suite 129<br>Beaverton, OR 97005  | * |
| Hamilton Hallmark<br>8214 154th Avenue, N.E.<br>Redmond, WA 98052-3556      | * | Jaco Electronics<br>2120-A Braker Lane<br>Austin, TX 78758                      | * |
| Hamilton Hallmark<br>2440 S. 179th Street<br>New Berlin, WI 53146           | * | Jaco Electronics<br>1209 N. Glenville<br>Richardson, TX 75081                   | * |



MANUFACTURER: Vishay Resistive Systems Group (Continued)

|   |   |   |   |
|---|---|---|---|
| Kent Electronics<br>4900-D Corporate Drive<br>Huntsville, AL 35805                  | * | Kent Electronics<br>P.O. Box 677<br>Pine Brook, NJ 07058                                  | * |
| Kent Electronics<br>15455 N. Greenway-Hayden Loop<br>Scottsdale, AZ 85260           | * | Kent Electronics<br>2191 George Urban Road<br>Depew, NY 14043                             | * |
| Kent Electronics<br>17815-R Newhope Street<br>Fountain Valley, CA 92708             | * | Kent Electronics<br>117 West Liberty Street<br>Rome, NY 13440                             | * |
| Kent Electronics<br>1830 McCandless Drive<br>Milpitas, CA 95035                     | * | Kent Electronics<br>31200 Solon Road, Suite 12<br>Solon, OH 44139                         | * |
| Kent Electronics<br>6195 Cornerstone Court E., Suite 114<br>San Diego, CA 92121     | * | Kent Electronics<br>9770 S.W. Nimbus Avenue<br>Beaverton, OR 97005                        | * |
| Kent Electronics<br>361-H Inverness Drive, S.<br>Englewood, CO 80112                | * | Kent Electronics<br>11500 Metric Boulevard, Suite 410<br>Austin, TX 78758-4031            | * |
| Kent Electronics<br>29-A Village Lane<br>Wallingford, CT 06492                      | * | Kent Electronics<br>7433 Harwin Drive<br>Houston, TX 77036-2015                           | * |
| Kent Electronics<br>6355 Metrowest Blvd., Suite 240<br>Orlando, FL 32835            | * | Kent Electronics<br>1360 Presidential Drive, Suite 170<br>Richardson, TX 75081-2437       | * |
| Kent Electronics<br>5340 N. Park Place, N.E.<br>Suite 110<br>Cedar Rapids, IA 52402 | * | Kent Electronics<br>8469 154th Avenue<br>Redmond, WA 98052-2518                           | * |
| Kent Electronics<br>721 Landmeier Road<br>Elk Grove Village, IL 60007-4757          | * | Texas Components Corp.<br>1716 W. Sam Houston Parkway N.<br>Houston, TX 77043             | * |
| Kent Electronics<br>6316 College Boulevard<br>Overland, KS 66211                    | * | T.T.I., Inc.<br>4625 S. Wandler Drive, Suite 108<br>Tempe, AZ 85282                       | * |
| Kent Electronics<br>19 Alpha Road<br>Chelmsford, MA 01824                           | * | T.T.I., Inc.<br>1535 McCandless Dr., Bldg. 11<br>Milipitas, CA 95035                      | * |
| Kent Electronics<br>9104 Guilford Road, Suite 1010<br>Columbia, MD 21046            | * | T.T.I., Inc.<br>15535 San Fernando Mission Blvd.,<br>Suite 319<br>Mission Hills, CA 91345 | * |
| Kent Electronics<br>953 Westgate Drive<br>St. Paul, MN 55114                        | * | T.T.I., Inc.<br>13220 Evening Creek Drive, S.<br>Suite 101<br>San Diego, CA 92128         | * |
| Kent Electronics<br>1135 Kildaire Farm Road, Suite 329-6<br>Cary, NC 27511          | * |   |   |

MANUFACTURER: Vishay Resistive Systems Group (Continued)

|   |   |   |   |
|---|---|---|---|
| T.T.I., Inc.<br>1570 Brookhollow, Suite 103<br>Santa Ana, CA 92705                | * | T.T.I., Inc.<br>4700 Rockside Road, Suite 500<br>Independence, OH 44131         | * |
| T.T.I., Inc.<br>6510 W. 91st Avenue, Suite 104<br>Westminster, CO 80030           | * | T.T.I., Inc.<br>7185 S.W. Sandburg Road, Suite 202<br>Tigard, OR 97223          | * |
| T.T.I., Inc.<br>8 Fairfield Boulevard<br>Wallingford, CT 06492                    | * | T.T.I., Inc.<br>2441 Northeast Parkway<br>Fort Worth, TX 76101-1896             |   |
| T.T.I., Inc.<br>6220 South Orange Blossom Trail<br>Suite 516<br>Orlando, FL 32809 | * | T.T.I., Inc.<br>7539 Airport Freeway<br>Fort Worth, TX 76118                    | * |
| T.T.I., Inc.<br>6410 Atlantic Boulevard, Suite 150<br>Norcross, GA 30071          | * | T.T.I., Inc.<br>4033 E. Belknap<br>Fort Worth, TX 76111-6696                    | * |
| T.T.I., Inc.<br>1301 Basswood, Suite 350<br>Schaumburg, IL 60173                  | * | T.T.I., Inc.<br>10849 Kinghurst Drive, Suite 135<br>Houston, TX 77099-3450      | * |
| T.T.I., Inc.<br>9300 110 Street, Suite 645<br>Overland Park, KS 66210             | * | T.T.I., Inc.<br>9577 N.E. 153rd Avenue<br>Redmond, WA 98052                     | * |
| T.T.I., Inc.<br>2 Highwood Drive<br>Tewksbury, MA 01876-1194                      | * | Tri-Start Electronics<br>277 Fairfield Road, Suite 122<br>Fairfield, NJ 07004   | * |
| T.T.I., Inc.<br>6420-B Dobbin Road<br>Columbia, MD 21045                          | * | Tri-Start Electronics<br>134 Remington Boulevard<br>Ronkonkoma, NY 11779        | * |
| T.T.I., Inc.<br>12301 Whitewater Drive, Suite 240<br>Minnetonka, MN 55343         | * | Tri-Start Electronics<br>18 Broad Street, Suite 811<br>Charleston, SC 29401     | * |
| T.T.I., Inc.<br>4805 Green's Dairy Road, Suite 120<br>Raleigh, NC 27604           | * | Vishay Resistors<br>63 Lincoln Highway<br>Malver, PA 19355-2120<br>(Category B) |   |
| T.T.I., Inc.<br>1 Executive Drive, Suite 9<br>Morrestown, NJ 08057                | * |   |   |
| T.T.I., Inc.<br>921 S. Second Street<br>Ronkonkoma, NY 11779                      | * |   |   |
| T.T.I., Inc.<br>6500 Poe Avenue, Suite 400<br>Dayton, OH 45414                    | * |   |   |