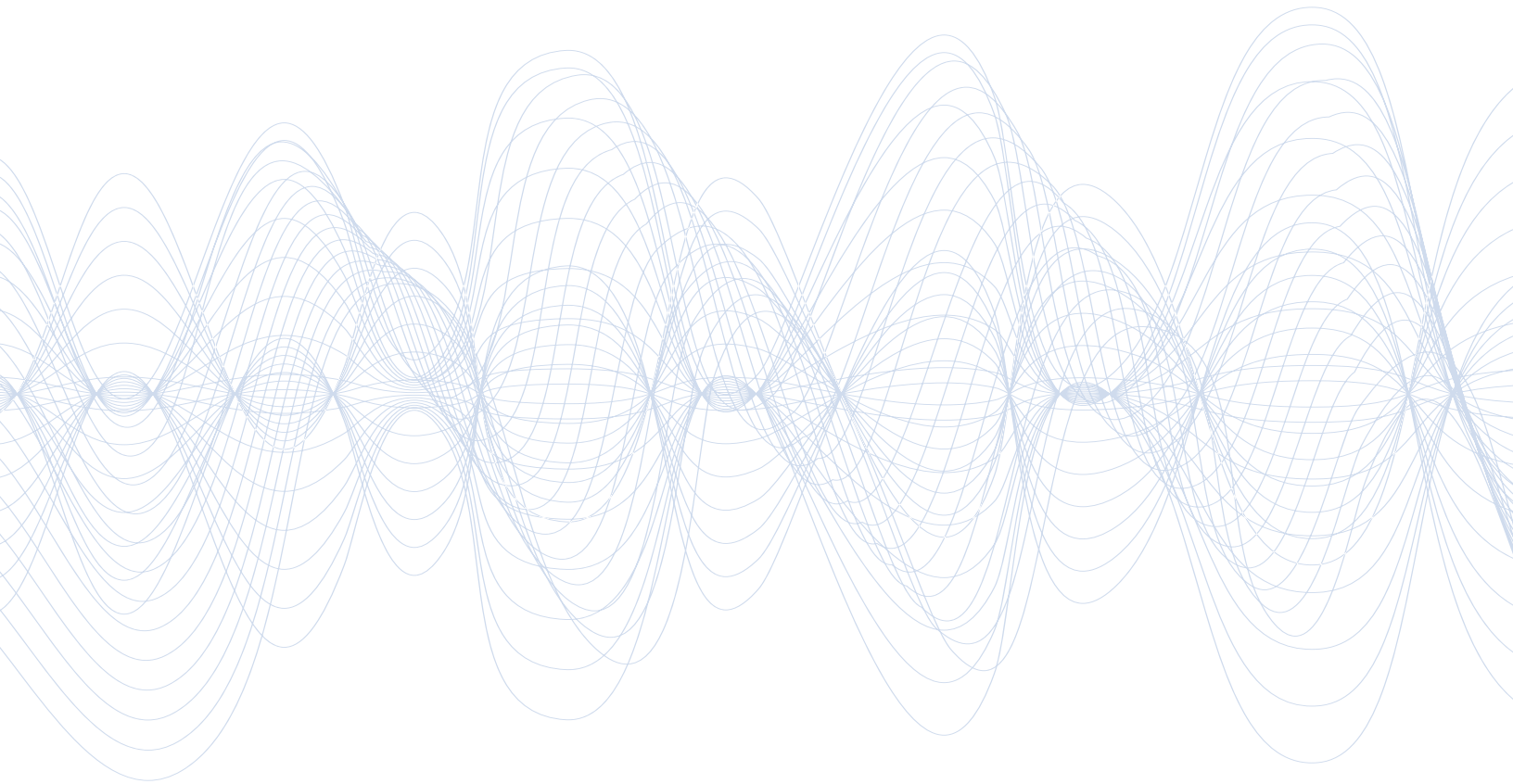


MICROWAVE SWITCHES



DowKey® Microwave

CORPORATION

A **DOVER** COMPANY

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* For more details about these product lines, see Dow-Key's Space Products brochure or Switch Matrix catalog.

ORDERING INFORMATION

At Dow-Key you are not limited to the products in this catalog, as it is intended to be used as a guide in selecting a switch product or switching matrix for a given application. Requests for modification of standard items and their specifications in order to meet specific needs are always welcome. Inquiries regarding custom integrated components or switch assemblies are also always appreciated.

The catalog is subject to change without notification at any time and new product information is constantly being added in form of press releases through the corporate website at www.dowkey.com. Please visit our website to request quotes, download product materials, for a Sales Representative, and factory contact information.

Ordering

The information found in this catalog or on www.dowkey.com should be sufficient for you to select a particular Dow-Key product. In those cases where additional information is required, call Dow-Key directly or our local Dow-Key Sales Representative who will provide you with price and delivery information.

When placing your order, please include the part number, product name, quantity, and shipping instructions. In the case of a non-standard product, a full description of desired features must accompany your order to avoid any error. Send orders to:

Dow-Key Microwave
4822 McGrath Street
Ventura, CA 93003 U.S.A.

Or send them in care of our Sales Representative for your area. A complete listing of our Representatives can be found at www.dowkey.com.

Orders will be accepted by way of U.S. mail, telephone, fax, or email. Confirmation of orders on your standard Purchase Order is required.

Telephone: 805.650.0260
Fax: 805.650.1734
Email: askdk@dowkey.com

Domestic Terms

Net 30 days, F.O.B. Dow-Key plant, Ventura, California, U.S.A. unless otherwise specified. Shipments made to firms are on a C.O.D. basis unless credit has been established or on receipt of advance payment. American Express, MasterCard and Visa are also accepted.

Export Terms

Unless other terms have been agreed upon in advance, export terms are either payment in advance of shipment or against a confirmed irrevocable letter of credit. All prices are F.O.B. Ventura, California, U.S.A.

Shipping

Orders within the United States and Canada will be shipped via United Parcel Service Ground unless other instructions are received. Shipment to all other countries will be by customer direction.

Packaging

All products shipped from Dow-Key Microwave, Ventura, California are packaged in accordance with best commercial practices unless otherwise specified in the contract or purchase order.

Delivery

Most standard products are available from stock or within our typical manufacturing lead-time of 1 to 8 weeks after receipt of order.

Source Inspection

Should Customer Source Inspection of product be required, a charge of \$300.00 per occurrence will apply.

Application and Technical Assistance

Dow-Key provides a knowledgeable and experienced engineering staff to work closely with customers in product design and application development as well as minor modifications to existing standard products. This service is also available for the design of individual specialized switching components or complex switching systems.

Warranty

Dow-Key Microwave Corporation warrants all switch products to be free of defects in material and workmanship for a period of one year after the date of initial shipment. The limit of liability under this warranty is to repair, replace or refund purchase price on any product or part thereof that is returned by the purchaser and proves to be defective after examination by Dow-Key. This warranty does not extend to any products mishandled, misused or subjected to abuse or neglect in storage, transportation or use. Repairs or alterations made without consent or knowledge of Dow-Key Microwave Corporation will invalidate this warranty. This warranty supercedes all others, either expressed or implied.

Return Material Authorization

Please contact Dow-Key to receive a Return Material Authorization (RMA) number prior to returning any item for service. Items returned to Dow-Key without a RMA number are subject to return without evaluation or any work being done. Dow Key will not accept COD freight charges for returned items.

Dow-Key Terms and Conditions

Dow-Key Microwave Corporation Terms and Conditions apply to all orders unless other provisions have been previously agreed upon. A copy of Dow-Key's Terms and Conditions can be found at www.dowkey.com.

Certificate of Compliance

If requested at order placement, a certificate of compliance is available upon shipment.

Minimum Order Amount

Dow-Key's minimum order amount is \$300.00.

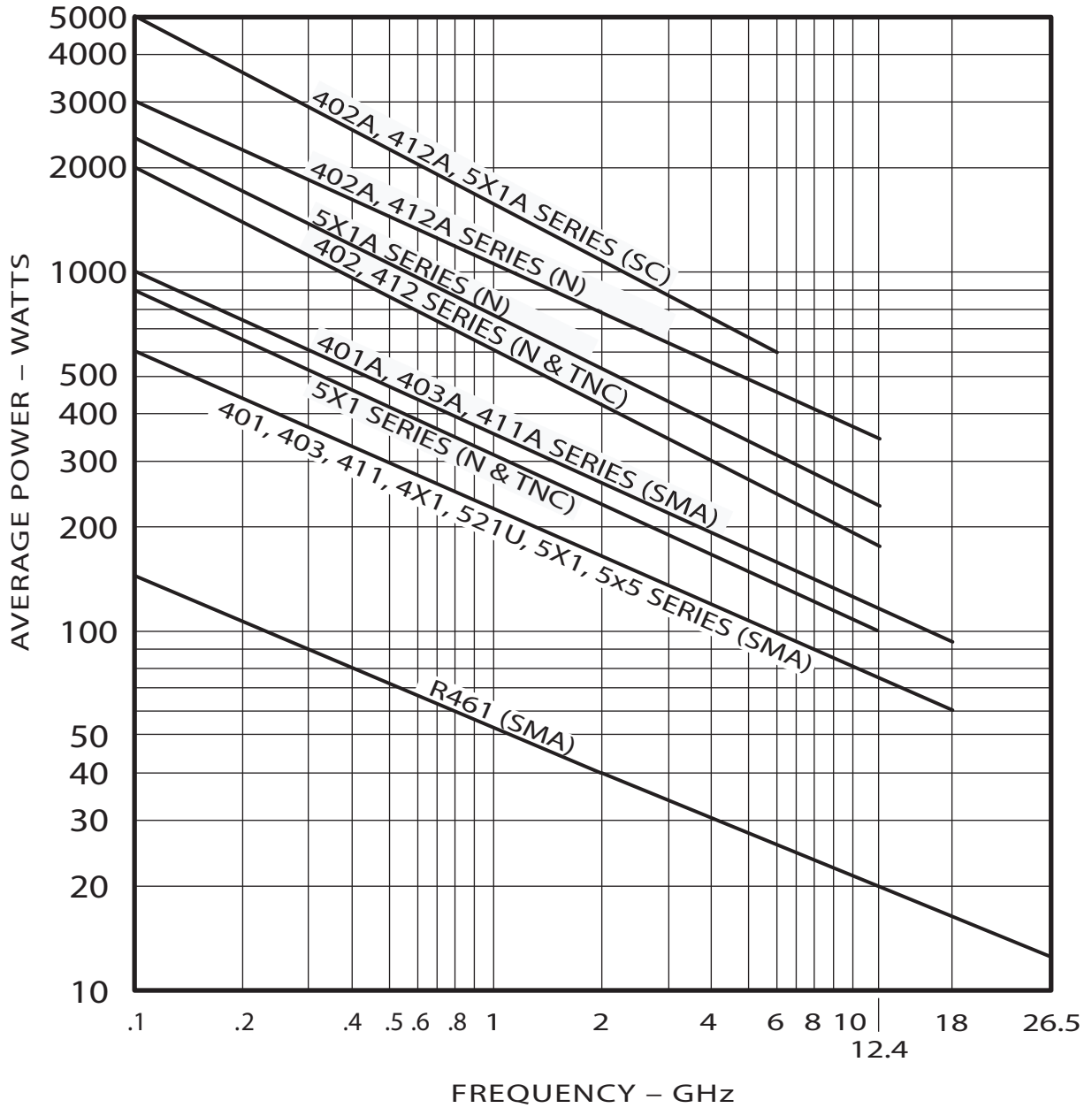
Product Changes

Dow-Key Microwave Corporation continually improves products as new technologies, materials and processes become available. We therefore reserve the right to alter, amend, discontinue, or replace any product and or specifications in this catalog at our sole discretion without prior notice.



POWER CHART

This chart is based on the following conditions:
 Ambient Temperature = 40° C; Altitude = Sea Level; VSWR = 1.0:1; Non-switching



R461-Series is based on the following conditions:
 Ambient Temperature = 75° C; Altitude = Sea Level; VSWR < 1.2:1

For TRANSCO switches, please consult factory for additional information.

PART NUMBERING SYSTEM

X A B C - D E FG H I J

- (X) RELAY FAMILY
- 4/5 50 Ohm System
 - 3 50 Ohm Matrix Multipos.
 - 7 70 Ohm System
 - R 50 Ohm, Reliant Switch

- (A) CONFIGURATION
- | | | | |
|---|----------|---|-------|
| 0 | SPDT | A | SP10T |
| 1 | Transfer | B | SP11T |
| 2 | SPST | C | SP12T |
| 3 | SP3T | E | SP14T |
| 4 | SP4T | F | SP16T |
| 5 | SP5T | | |
| 6 | SP6T | | |
| 7 | SP7T | | |
| 8 | SP8T | | |
| 9 | SP9T | | |

- (B) SIZE
- 1 Std. Case, normally SMA connectors (Radial)
 - 2 Std. Case, normally N Connectors
 - 3 Small Case, normally SMA (Multithrow)
 - 4 Intermediate Cavity, SMA/TNC
 - 5 Miniature Radial
 - 6 Std. Case, normally N connectors (Radial)
 - 7 Microminiature Radial
 - 9 Microminiature Switch

- (C) SPECIAL OPTIONS
- | | | | |
|---|--------------------------|---|--------------------------------|
| A | High Power | K | 26.5 GHz |
| B | Bypass (2-4) | L | Flange Mount Cavity |
| C | Special Mounting Bracket | M | Fast Switching |
| | | N | Remove STD Mounting Bracket |
| D | Bypass (1-2) | P | Power Connector |
| E | Bypass (3-4) | R | Reverse Polarity |
| F | Bypass (1-3) | S | Seal, Enhanced Epoxy or Gasket |
| G | Make Before Break | T | -55°C to +85°C |
| H | HI-REL | U | 5 Million Cycles |
| I | Immersion Seal | V | Laser Seal |
| J | "D" Type Connector | W | Low PIM |
| | | Y | 40 GHz |

- (D) ACTUATOR COIL TYPE
- 1 Manual
 - 2 Failsafe, Position 1
 - 3 Pulse Latching
 - 4 Latching, Self Cutoff
 - 5 Normally Open
 - 6 Failsafe, Suppression Diodes
 - 7 Pulse Latching, Suppression Diodes
 - 8 Latching Reset, Suppression Diodes
 - 9 Normally Open, Suppression Diodes

- (J) SPECIAL OPTIONS
- A TTL HI, Commercial (2.4 - 5.5 Vdc)
 - B TTL HI, Military (2.4 - 5.5 Vdc), JANTX
 - E CMOS BCD Decoding Logic & MOSFET Driver, Commercial
 - G RS-422
 - L TTL Logic Low, Commercial (0.0-0.8Vdc)
 - N CANBUS
 - S Single Line TTL
 - T Ethernet
 - U USB
 - TV Thermal Vacuum

- (I) TERMINATIONS
- | | | | |
|---|-------|---|-------------------|
| 1 | Short | 5 | 50Ω, 5W |
| 2 | Open | 7 | 50Ω, Term, Port 1 |
| 3 | 50 Ω | 8 | 50Ω, SMA |
| 4 | 75 Ω | | |

- (H) AUXILIARY/INDICATOR CONTACTS
- 0 None
 - 2 Mechanical SPST
 - 3 Mechanical SPDT
 - 5 Optical
 - 6 Electronic

- (FG) CONNECTORS
- 01 N
 - 02 BNC
 - 03 TNC
 - 04 UHF
 - 05 C
 - 06 GPO*
 - 07 BMA (OSP)
 - 08 SMA
 - 09 3.5mm (SMA Interface)
 - 11 2.9mm (K)
 - 12 SMB
 - 14 TPS
 - 19 Pins (PC Board Drop-in)
 - 51 HN
 - 53 SC
 - 54 7/16
 - 71 SMB (50 Dhm)
 - 72 SMB (75 Dhm)
 - 73 SMB (Mini 75 Dhm)

*GPO is a trademark of Gilbert Engineering

- (E) ACTUATOR COIL VOLTAGE
- | | | | |
|---|--------|---|--------|
| 0 | Manual | 7 | 20 Vdc |
| 1 | 6 Vdc | 8 | 24 Vdc |
| 2 | 12 Vdc | 9 | 15 Vdc |
| 3 | 28 Vdc | | |
| 4 | 48 Vdc | | |
| 5 | 5 Vdc | | |