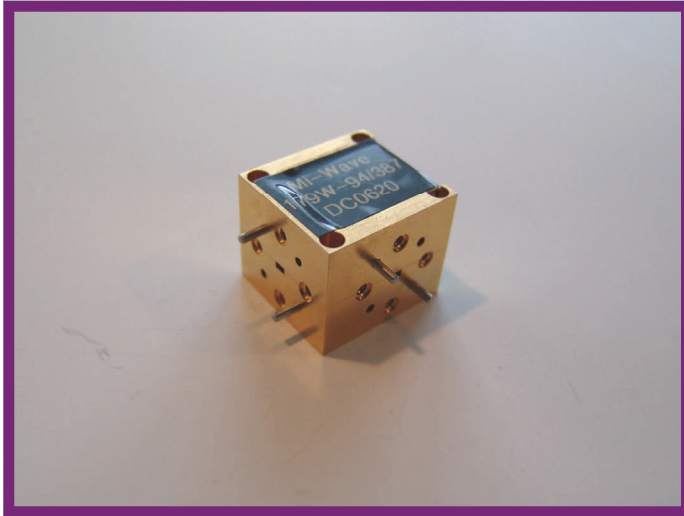


179 Series

Y-Junction Circulators



Features

- Low Loss
- Low VSWR
- High Isolation
- Broad Bandwidth
- Compact & Rugged
- Optimal Temperature Response

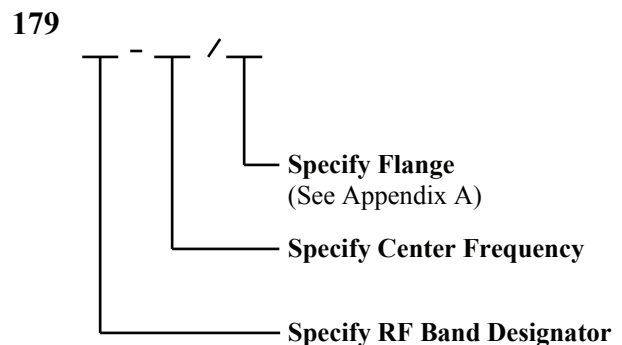
Description 179 Series Circulators

Mi-Wave' 179 series is an H-plane, three port Y-junction ferrite device. All external mating surfaces are machined to extreme flatness to provide connection to standard waveguide flanges for minimum discontinuity. The 179 series circulators are available in standard waveguide sizes from 18.0 to 110 GHz, in round style flanges only.

Applications

The 179 series Y-junction circulators are useful in test setup and operational systems.

Ordering Information



Mi-Wave

Millimeter Wave Products Inc.

www.miwv.com

2200 Tall Pines Drive, Suite 100

Largo, FL 33771

Tel. (727) 536-0033 Fax. (727) 536-0012

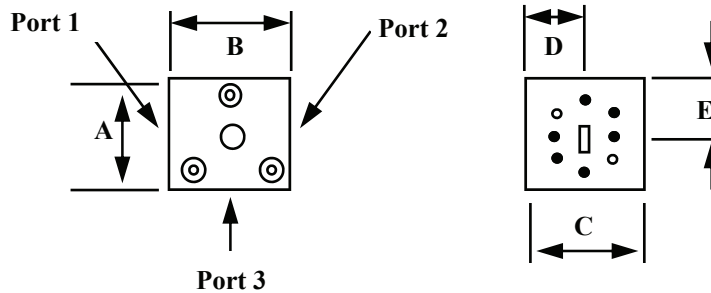
E: sales@miwv.com

179 Series Y-Junction Circulators

Technical Specifications

| Model Number | 179K | 179A | 179B | 179U | 179V | 179E | 179W |
|-----------------------------|-------------------|-----------|-----------|-----------|-----------------|-----------|------------|
| Frequency Band (GHz) | 18.0-26.5 | 26.5-40.0 | 33.0-50.0 | 40.0-60.0 | 50.0-75.0 | 60.0-90.0 | 75.0-110.0 |
| Bandwidth ¹ | 1.8GHz | 1.3GHz | 1.2GHz | 1.2GHz | 1.3GHz | 1.3GHz | 1.3GHz |
| Isolation ² (dB) | 18 | 18 | 18 | 15 | 15 | 15 | 15 |
| Insertion Loss (dB) | 0.4 | 0.4 | 0.5 | 0.7 | 1.0 | 1.0 | 1.0 |
| VSWR ² Max. | 1.30 | 1.30 | 1.30 | 1.35 | 1.40 | 1.40 | 1.40 |
| Temperature Range | -15° C to + 65° C | | | | 0° C to + 50° C | | |
| Peak Power (kW) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Average Power (Watts) | 30 | 30 | 25 | 15 | 10 | 5 | 5 |
| Weight (oz.) | 3.0 | 3.0 | 3.0 | 3.0 | 5.0 | 5.0 | 5.0 |
| Flange Type | UG425/U | UG381/U | UG383/U | UG383/U | UG385/U | UG387/U | UG387/U |

1. Specify center frequency.
2. Specification shown is for band edges.



Dimensional Specifications

| Model No. | A | | B | | C | | D | | E | |
|-----------|------|------|------|------|------|-------|-----|------|-----|------|
| | in | mm | in | mm | in | mm | in | mm | in | mm |
| 179K | 1.50 | 38.1 | 1.25 | 31.8 | 1.18 | 29.97 | .59 | 14.9 | .59 | 14.9 |
| 179A | 1.50 | 38.1 | 1.25 | 31.8 | 1.18 | 29.97 | .59 | 14.9 | .59 | 14.9 |
| 179B | 1.50 | 38.1 | 1.25 | 31.8 | 1.18 | 29.97 | .59 | 14.9 | .59 | 14.9 |
| 179U | 1.50 | 38.1 | 1.25 | 31.8 | 1.18 | 29.97 | .59 | 14.9 | .59 | 14.9 |
| 179V | 1.10 | 27.9 | 1.00 | 25.4 | .90 | 22.9 | .50 | 12.7 | .45 | 11.4 |
| 179E | 1.10 | 27.9 | 1.00 | 25.4 | .90 | 22.9 | .50 | 12.7 | .45 | 11.4 |
| 179W | 1.10 | 27.9 | 1.00 | 25.4 | .90 | 22.9 | .50 | 12.7 | .45 | 11.4 |

Mi-Wave

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