

# CAVITY MULTIPLEXER

## PART NO. : WV-8MUL-COM03

### ◆ APPLICATION

> 8 Multi Band System

### ◆ FEATURE

> High Reliability  
> RoHS Compliant

### ◆ ELECTRICAL SPECIFICATION

| ITEM                    | SPECIFICATION  |                        |                |                        |                |                        |                |                        |
|-------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|----------------|------------------------|
| Frequency Range         | Tetra/C2000    |                        |                |                        | EGSM900        |                        |                |                        |
| Port                    | P1             | P2                     |                | P3                     |                | P4                     |                |                        |
| Direction               | UL             | DL                     |                | UL                     |                | DL                     |                |                        |
| Frequency Range(MHz)    | 380~385        | 390~395                |                | 880~915                |                | 925~960                |                |                        |
| Passband Insertion Loss | 1.5dB Max      | 1.5dB Max              |                | 1.5dB Max              |                | 1.5dB Max              |                |                        |
| Passband Ripple(P-P)    | 0.7dB Max      | 1.0dB Max              |                | 1.1dB Max              |                | 1.1dB Max              |                |                        |
| Passband Return Loss    | 15dB Min       | 15dB Min               |                | 15dB Min               |                | 15dB Min               |                |                        |
| Attenuation             | Freq.<br>(MHz) | Atten<br>[dB]<br>(min) | Freq.<br>(MHz) | Atten<br>[dB]<br>(min) | Freq.<br>(MHz) | Atten<br>[dB]<br>(min) | Freq.<br>(MHz) | Atten<br>[dB]<br>(min) |
|                         | -              | -                      | 380-385        | 100                    | 380-385        | 100                    | 380-385        | 100                    |
|                         | 390-395        | 100                    | -              | -                      | 390-395        | 100                    | 390-395        | 100                    |
|                         | 880-915        | 100                    | 880-915        | 100                    | -              | -                      | 880-915        | 100                    |
|                         | 925-960        | 100                    | 925-960        | 100                    | 925-960        | 100                    | -              | -                      |
|                         | 1710-1785      | 100                    | 1710-1785      | 100                    | 1710-1785      | 100                    | 1710-1785      | 100                    |
|                         | 1805-1880      | 100                    | 1805-1880      | 100                    | 1805-1880      | 100                    | 1805-1880      | 100                    |
|                         | 1920-1980      | 100                    | 1920-1980      | 100                    | 1920-1980      | 100                    | 1920-1980      | 100                    |
|                         | 2110-2170      | 100                    | 2110-2170      | 100                    | 2110-2170      | 100                    | 2110-2170      | 100                    |
|                         | 2500-2570      | 100                    | 2500-2570      | 100                    | 2500-2570      | 100                    | 2500-2570      | 100                    |
|                         | 2620-2690      | 100                    | 2620-2690      | 100                    | 2620-2690      | 100                    | 2620-2690      | 100                    |

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| ITEM                    | SPECIFICATION |                  |             |                  |             |                  |             |                  |
|-------------------------|---------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|
| Frequency Range         | PGSM1800      |                  |             |                  | UMTS2100    |                  |             |                  |
| Port                    | P5            |                  | P6          |                  | P7          |                  | P8          |                  |
| Direction               | UL            |                  | DL          |                  | UL          |                  | DL          |                  |
| Frequency Range(MHz)    | 1710~1785     |                  | 1805~1880   |                  | 1920~1980   |                  | 2110~2155   |                  |
| Passband Insertion Loss | 1.5dB Max     |                  | 1.5dB Max   |                  | 1.5dB Max   |                  | 1.5dB Max   |                  |
| Passband Ripple(P-P)    | 1.1dB Max     |                  | 1.1dB Max   |                  | 0.7dB Max   |                  | 0.7dB Max   |                  |
| Passband Return Loss    | 15dB Min      |                  | 15dB Min    |                  | 15dB Min    |                  | 15dB Min    |                  |
| Attenuation             | Freq. (MHz)   | Atten [dB] (min) | Freq. (MHz) | Atten [dB] (min) | Freq. (MHz) | Atten [dB] (min) | Freq. (MHz) | Atten [dB] (min) |
|                         | 380-385       | 100              | 380-385     | 100              | 380-385     | 100              | 380-385     | 100              |
|                         | 390-395       | 100              | 390-395     | 100              | 390-395     | 100              | 390-395     | 100              |
|                         | 880-915       | 100              | 880-915     | 100              | 880-915     | 100              | 880-915     | 100              |
|                         | 925-960       | 100              | 925-960     | 100              | 925-960     | 100              | 925-960     | 100              |
|                         | -             | -                | 1710-1785   | 100              | 1710-1785   | 100              | 1710-1785   | 100              |
|                         | 1805-1880     | 100              | -           | -                | 1805-1880   | 100              | 1805-1880   | 100              |
|                         | 1920-1980     | 100              | 1920-1980   | 100              | -           | -                | 1920-1980   | 100              |
|                         | 2110-2170     | 100              | 2110-2170   | 100              | 2110-2170   | 100              | -           | -                |
|                         | 2500-2570     | 100              | 2500-2570   | 100              | 2500-2570   | 100              | 2500-2570   | 100              |
|                         | 2620-2690     | 100              | 2620-2690   | 100              | 2620-2690   | 100              | 2620-2690   | 100              |

## ◆ Port Isolation

| ITEM     | SPECIFICATION | REMARK             |
|----------|---------------|--------------------|
| Ports    | Freq. (MHz)   | Isolation[dB](min) |
| P1 to P2 | 387.5 - 390   | 90                 |
| P2 to P1 | 385 - 387.5   | 90                 |
| P3 to P4 | 920 - 925     | 90                 |
| P4 to P3 | 915 - 920     | 90                 |
| P5 to P6 | 1795 - 1805   | 90                 |
| P6 to P5 | 1785 - 1795   | 90                 |
| P7 to P8 | 1995 - 2110   | 90                 |
| P8 to P7 | 1980 - 1995   | 90                 |

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## ◆ ENVIRONMENTAL SPECIFICATION

| ITEM                        | SPECIFICATION  |
|-----------------------------|----------------|
| Operating Temperature Range | -20°C to +70°C |

## ◆ MECHANICAL SPECIFICATIONS

| ITEM               | SPECIFICATION                                                        |
|--------------------|----------------------------------------------------------------------|
| Dimension          | 433.0 x 288.0 x 117.0 Max(Included Tuning Screw Height)<br>(unit:mm) |
| Mounting Points    | See Outline Drawing                                                  |
| RF Connector       | ANT Port : N Female Connector<br>Other Port : SMA Female Connector   |
| Connector Position | See Outline Drawing                                                  |
| Finish             | Black color epoxy coating                                            |

## ◆ OUTLINE DRAWING

