

### MECHANICAL SPECIFICATIONS

MATERIAL - MATING FLANGES BRASS  
 FINISH - HIGH TEMPERATURE BLACK  
 FLANGES - WR 159 CPRG (GASKET GROOVED)  
 PRESSURE - 10 PSIG MAX.  
 TOLERANCES - 3 PLACES  $\pm 0.10$   
 2 PLACES  $\pm 0.20$

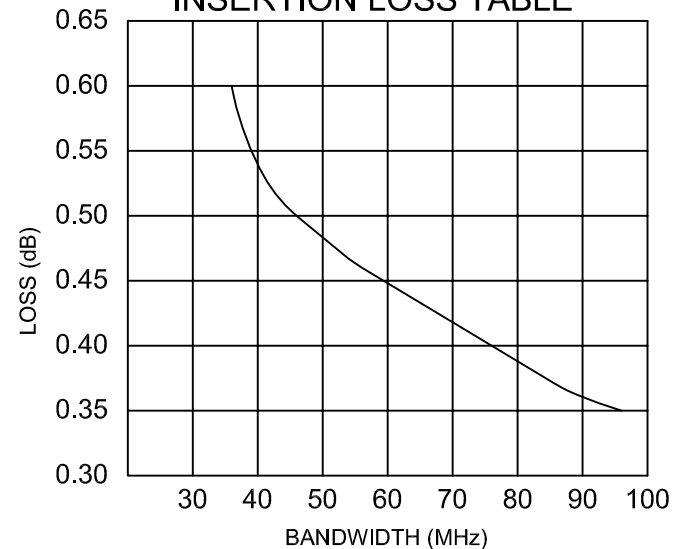
### ELECTRICAL SPECIFICATIONS

<b>FREQUENCY</b>	
FILTER INPUT PORT TO OUTPUT (PORT A-C)	_____ $F_o$ (Any Center Frequency 5.850-6.425 GHz)
THRU PORT TO OUTPUT (PORT B-C)	_____ 5.850- 6.425 Ghz except $F_o \pm 1.5 \times$ BANDWIDTH OR MORE
<b>VSWR (WITH REMAINING PORTS TERMINATED)</b>	
FILTER INPUT PORT TO OUTPUT (PORT A-C)	_____ 1.15 MAX
THRU PORT TO OUTPUT (PORT B-C)	_____ 1.15 MAX
<b>INSERTION LOSS</b>	
FILTER INPUT PORT TO OUTPUT (PORT A-C)	_____ PER GRAPH
THRU PORT TO OUTPUT (PORT B-C)	_____ 0.2 dB
<b>ISOLATION</b>	
FILTER INPUT PORT TO THRU PORT (A-C)	_____ 20 dB MIN
THRU PORT TO FILTER INPUT PORT (A-B)	_____ 40 dB MIN
<b>GROUP DELAY</b>	
FILTER INPUT PORT TO THRU PORT (A-C)	_____ 4.0 NS
THRU PORT TO OUTPUT (PORT B-C)	_____ 2.5 nS IN ANY 40 MHz BANDWIDTH
<b>POWER HANDLING</b>	
PORT A TO C	_____ 3 KW MAX.
PORT B TO C	_____ 15 KW MAX.

### FEATURES

- \* EXCELLENT COMBINING EFFICIENCY
- \* HIGH POWER HANDLING
- \* LOW INSERTION LOSS & VSWR
- \* MULTIPLE CHANNEL COMBINING USING TWO OR MORE IN SERIES.
- \* HIGH ISOLATION BETWEEN CHANNELS
- \* WIDE CHOICE OF FILTER BANDWIDTHS
- \* CHANNEL SPACING OF 1.5 x BANDWIDTH TO BANDEDGE OF NEXT CHANNEL
- \* OTHER CHANNEL SPACING AVAILABLE UPON REQUEST

INSERTION LOSS TABLE



MCS MICROWAVE COMPONENTS & SYSTEMS  
 MARLBORO MA 01752

**DIPLEXER**  
**WR-159**

OUTLINE NO.  
**4000-0000** REV -

FILE:DIP2

DATE:12/7/99