



## FEATURES

- \* EXCELLENT COMBINING EFFICIENCY
- \* HIGH POWER HANDLING
- \* LOW INSERTION LOSS & VSWR
- \* MULTIPLE CHANNEL COMBINING USING TWO OR MORE IN SERIES
- \* HIGH ISOLATION BETWEEN CHANNELS

## SPECIFICATIONS

### FREQUENCY

PORT 1 \_\_\_\_\_ ANY 36 or 40 MHz BAND (13.75-14.5 GHz)

PORT 2 \_\_\_\_\_ 13.75 TO 14.5 MHz EXCEPT  $f_o \pm 60$  MHz

### ISOLATION

PORT 1 TO PORT 2 \_\_\_\_\_ 20 dB MIN ( $f_o \pm 18$  MHz ( $f_o$  determined by customer))

PORT 1 TO PORT 3 \_\_\_\_\_ 40 dB MIN ( $f_o \pm 60$  MHz)

### INSERTION LOSS

PORT 1 TO PORT 3 \_\_\_\_\_ 1.0 dB MAX

PORT 2 TO PORT 3 \_\_\_\_\_ 0.15 dB MAX @  $f_o \pm 80$  MHz OR MORE

0.20 dB MAX @  $f_o \pm 60$  MHz

### VSWR

Port 1 , 1.15:1 MAX

Port 2 , 1.20:1 MAX

### GROUP DELAY IN BAND (MAX)

PORT 1-3      PORT 2-3

LINEAR \_\_\_\_\_ 0.1      0.1      ns/MHz

PARABOLIC \_\_\_\_\_ 0.015      0.002      ns/MHz<sup>2</sup>

RIPPLE \_\_\_\_\_ 0.5      0.25      ns p-p

### AMPLITUDE RESPONSE

0.1 dB MAX (WITHIN PASSBAND)

### POWER HANDLING

1.0 KW PORT 1 TO 3

3.5 KW PORT 2 TO 3

## MECHANICAL SPECIFICATIONS

MATERIAL - MATING FLANGES BRASS

FINISH - HIGH TEMPERATURE FLAT BLACK

FLANGES - WR 75 FLAT

PRESSURE - 10 PSIG MAX

TOLERANCES - 3 PLACES  $\pm 0.10$

2 PLACES  $\pm 0.20$

FILTER PORT  
PORT 1  
WR75 FLAT  
FLANGE ( 4 PL)

5.00

2.00

PORT 1

TERM PORT

$F_o = \text{xxxxxx}$  Mhz  
 $BW = \text{xx}$  MHz

5.50

A  $\pm 0.03$

varies with  
center freq

COMBINED PORT

THRU PORT

PORT 2

PORT 3

PORT 4

4.00

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## DIPLEXER WR-75

CAGE CODE	SIZE	DRAWING NO.	REV
1N0P6	C	4024-0000	A

FILE: DIP10      2/15/2000