



### 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 BLACK  
 FLANGES - WR 75 FLAT  
 PRESSURE - 10 PSIG MAX.  
 TOLERANCES - 3 PLACES ± 0.10  
 2 PLACES ± 0.20

Microwave Components and Systems Inc 583 Berlin Road Marlboro MA			
<b>DIPLEXER WR-75</b>			
CAGE CODE	SIZE	DRAWING NO.	REV
<b>1N0P6</b>	<b>C</b>	<b>4024-0000</b>	<b>A</b>
FILE: DIP10	2/15/2000		