## **182 Series** Diplexer



## Description

Mi-Wave's 180 series is an H-plane, three-junction, 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.

- Low Loss
- Low VSWR
- High Isolation (30 db typ.)

The 180 Series circulators are available in standard wave-guide sizes from 18.00 to 110 GHz.

## **Applications**

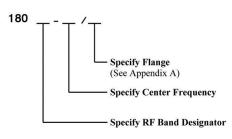
The 180 Series Y-junction circulators are useful in radar, sensing and communication systems.



Dimensional Specifications											
Model No.	A		В		c		D		E		
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
180K			*		-						
180A											
180B	K–W Band please consult MI-Wave for current outline										
180U											
180V											
180E											
180W											

TECHNICAL SPECIFICATIONS (TYPICAL)												
Model No.	180K	180A	180B	180U	180V	180E	180W					
Frequency Band (GHz)	18–26.5	26.5–40	33–50	40–60	50–75	60–90	75–110					
Bandwidth <sup>1</sup>	1.2 GHz	1.2 GHz	1.0 GHz	1.0 GHz	1.0 GHz	1.0 GHz	1.0 GHz					
Isolation <sup>2</sup> (dB) ( <i>typ</i> )	>30	>30	>30	>30	>30	>30	>30					
Insertion Loss (dB) <sup>1</sup> ( <i>typ</i> )	0.7	0.8	0.9	1.0	1.2	1.4	1.5					
VSWR (typ)	1.30	1.30	1.30	1.35	1.40	1.4	1.4					
Temperature Range		-0° to	+40°C	0° to +40°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	UG-595/U	UG-599/U	UG-383/U	UG-383/U	UG-385/U	UG-387/U	UG-387/U					

## **Ordering Information**



1. Specify center frequency.