

**WAVEGUIDE  
DUAL JUNCTION  
X-BAND  
CIRCULATOR  
WITH LOAD  
MODEL 3WR90NA**

*compact*  
“Suitable for systems or applications where size and weight are at a premium”

This dual junction X-Band circulator in WR90 waveguide is used to separate forward transmit power from returning receive power. This type of circulator provides separation between the transmitter and the receiver but also absorbs any high energy reflected power. This is all realized in a compact space which makes it suitable for avionics systems or space applications where size and weight are at a premium.



*Characteristics*

FREQUENCY BAND	9.2-9.7 GHz
PEAK POWER	10 kW
AVERAGE POWER	500 W
VSWR	1.20:1 MAX, 1.15:1 TYP
LOSS	J1-J2 - 0.25 dB MAX, 0.2 dB TYP
	J2-J3 - 0.5 dB MAX, 0.4 dB TYP
ISOLATION	J3-J1 - 20 dB MIN
	J2-J1 - 18 dB MIN
	J3-J2 - 40 dB MIN

*Markets*

MILITARY	AVIONIC RADAR
COMMERCIAL	AVIONIC RADAR
SPACE	COMMUNICATION SYSTEMS

*Features*

*Benefits*

· SPECIAL SINTERED FERRITE	· AVOID NON LINEARITY AT HIGH PEAK POWER LEVELS AND MAINTAINS LOW LOSS AT BOTH HIGH AND LOW POWER LEVELS
· HIGH ISOLATION	· MINIMIZES INTERFERENCE DUE TO REFLECT SIGNAL
· WIDE TEMPERATURE RANGE	· ENSURES HIGH TEMPERATURE STABILITY OVER -40° C TO +85° C
· LOW INSERTION LOSS	· ENSURES LOW SYSTEM NOISE FIGURE



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*The New Thinking in Wireless Technology*