

S-Band Distributed 3-Port Isolator Assembly, Model #102647NP-S



Product Overview

This isolator assembly consists of EM Design's phase-shifted distributed 3-port circulator, without sampling probes, and an EM Design Waterload, Model #R284-3.0.

The straight input port 1 is on the left side and the output port 2 is on the right side of the photograph. The power reflected at port 2 is absorbed by the load on port 3.

The high power S-Band circulator is based on EM Design's unique patented concept and is especially attractive for isolating reflection from resonant loads such as accelerators or other similar devices. This isolator assembly is set for the 2.998 GHz frequency, but can be readily optimized for other frequencies, including 2.856 GHz. Water cooling is connected in series so that the flow is conveyed through the circulator and the attached load.

Unit Specifications

Peak Power	8 MW	Center Frequency	2.998 GHz
Average Power	8 KW		
Flanges	CPR284F	VSWR (Port 1)	1.10 max
Water Flow	4.5 GPM		
Required Water Treatment	Deionized Water		
Water Temperature	25º to 40º C	Isolation	
	(selectable)	(Port 2 to Port 1)	>35 db
Gas Pressure	35 PSIG SF ₆		
Length	18.8" (478 mm)	Insertion	
		(Port 1 to Port 2)	<0.30 db
Weight	30 lbs. (13.6 Kg)		