

GAS-DISCHARGE DEVICE

These gas-discharge devices are for use in polarization or branching-type duplexers in radar systems. In such service they perform the same function as A-TR and Pre-TR tubes and can be used to replace these switching tubes where higher

power levels are required. In operation the gasfilled envelope ionizes to form a highly conductive gas column when high radio-frequency power is applied during the transmission period, and deionizes when the power is removed.

APPLICATION

GL-6619—Groups of ten to twenty in polarization twist duplexers, 2700 to 2900 megacycles.

GL-6620—Groups of two in branching-type duplexers, 3400 to 3600 megacycles.

GL-6621—Groups of ten to twenty in polarization twist duplexers, 2700 to 2900 megacycles.



TECHNICAL INFORMATION

GENERAL

Tube Typo Number	GL-6619	GL-6620	GL-6621	1
Electrical		ļ		
Firing Power	250	250	250	Min Kilowatts
	Tube axis 85 degrees from direction of electric field vector.			
Recovery Time	25	40	50	Max Microseconds
(single tube)	Peak power = 50 kw;	Peak power = 50 kw;	Peak power = 50 kw;	ĺ
	pulse repetition rate	pulse repetition rate	pulse repetition rate	
	=1000 pps; pulse	=1000 pps; pulse	=1000 pps; pulse	1
	duration = 1.0 μ sec;	duration = 1.0 μ sec;	duration = 1.0 μ sec;	
	magnetron frequency	magnetron frequency	magnetronfrequency	:
	=2800 ±20 mc;	=3500 ±20 mc;	= 2800 ± 20 mc;	
	probing signal fre-	probing signal fre-	probing signal fre-	
	quency = 2900 ±30	quency =3570 ±30	quency = 2900 ±30	
	mc.	mc.	mc.	
	Tube axis is parallel to incident electric field vector.			ì
Mechanical				
Mounting Position	Any	Any	Any	
Ambient Temperature				
Range (non-operating)	-40 to +100	-40 to +100	-40 to +100	[C
Net weight, approximate	3	3	2	Ounces
Maximum Ratings		:		
Transmitter Peak Power	2.5	2	5	Megawatts
Frequency Range	2700 to 2900	3400 to 3600	2700 to 2900	Megacycles per Second





