Low power coaxial isolators

I70105/A, I62104/A, I71121/A and I71121/A



The I70105/A, I62104/A, I71121/A and I71121/A coaxial isolators were designed to be used for space-based frequency converters and receivers. Key requirements include electrical characteristics over a broad operating bandwidth, and exceptional EMC performance. These low power coaxial isolators can be supplied with any combination of SMA(m) and (f) connectors. Ports can be arranged with the load on any port. Note that these devices are also available as circulators.

Specifications

Low Power Coaxial	Performance			
Part Number	I70105/A	I62104/A	I71121/A	171121/A
Function	Isolator	Isolator	Isolator	Isolator
ICD	C105628	B108503	B108463	C106873
Non-operating	-45 to +125C	-45 to +125C	-45 to +125C	-45 to +125C
Acceptance	-30 to +80C	-30 to +80C	-30 to +80C	-30 to +80C
Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Operating Frequency	7.0 to 10.5GHz	6.2 to 10.4GHz	7.6 to 11.8GHz	8.0 to 12.2 GHz
Insertion Loss	0.35dB	0.35dB	0.35dB	0.35dB
Return Loss	21 dB min	18 dB min	21 dB min	20 dB min
Isolation	21 dB min	18 dB min	21 dB min	20 dB min
EMC	80dB1	80dB1	80dB1	80dB1
Power handling	2W CW	2W CW	2W CW	2W CW
Mass	20g nom (mounting feet add 2f)			
Resistance to case	50 Ohms nom	50 Ohms nom	50 Ohms nom	50 Ohms nom
Interface	SMA	SMA	SMA	SMA
Environment	Space	Space	Space	Space