

High power microstrip isolators

I90102/D and I7286/A



The I90102/D and I7286/A high power microstrip isolators were designed to be used for space based applications radars. They are intended to be used within a hybrid construction and must be wire bonded into the user's circuit. Some devices are partially magnetically shielded while others are not. If partial magnetic shielding is desired this must be incorporated at the design phase. Note that most isolators produced for SSPA applications are designed so that their ports are arranged in a T configuration while devices used in TRMs tend to be arranged with their ports in a Y configuration. All high-power devices are guaranteed to be unconditionally linear under the worst-case operating conditions.

Specifications

High Power Microstrip	Performance	
Part Number	I90102/D	I7286/A
Function	Isolator	Isolator
ICD	B106207	B108430
Non-operating	-55 to +180C	-55 to +180C
Acceptance	-20 to +80C	-20 to +80C
Impedance	50 Ohms	50 Ohms
Operating Frequency	9.0 to 10.2GHz	7.2 to 8.6GHz
Insertion Loss	0.40 max	0.35dB max
Return Loss	20dB min	20dB min
Isolation	20dB min	20dB min
Power handling	10W CW	20W CW
Mass	0.5g nom	0.5g nom
Resistance to case	50 Ohms nom	50 Ohms nom
Port arrangement	T	T
Interface	Microstrip	Microstrip
Environment	Space, hybrid application	Space, hybrid application