

Passive Integrators



Passive integrators are designed to be used with derivative sensors, such as field or current probes, for the measurement of fast pulsed signals. Connected to this type of sensors, the passive integrator produces an overall flat response without the drawbacks of the numerical integration. The output of the passive integrator shall be connected directly to the high impedance input of a fast rise-time oscilloscope or of a 1 MΩ to 50 Ω impedance converter.

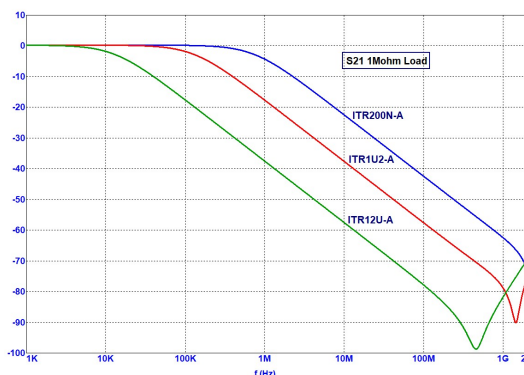
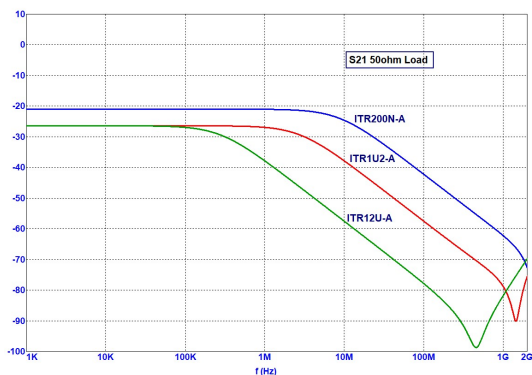
SPECIFICATIONS

Type	ITR200N-A	ITR1U2-A	ITR12U-A
Time constant	200 ns	1.2 μs	12 μs
Cut-off frequency	1.4 GHz	1 GHz	200 MHz
Source impedance	50 Ω		
Peak maximum input	1 kV (100 ns pulse)		
Load impedance	>10 kΩ (typ. 1 MΩ)		
Input connector	N (female)		
Output connector	BNC (male)		
Dimensions	63 x 18 x 18 mm		
Weight	65 g		

Other time constants available on request.

Typical performances

S21 on 50 ohm and on 1 Mohm load



Ordering information

TYPE	DESCRIPTION
ITR200N-A	Passive integrator, T = 200 ns, up to 1.4 GHz, connectors : N - BNC
ITR1U2-A	Passive integrator, T = 1.2 us, up to 1 GHz, connectors : N - BNC
ITR12U-A	Passive integrator, T = 12 us, up to 200 MHz, connectors : N - BNC