



Waveguide *p-i-n*-attenuator in frequency range 80–150 GHz



APPLICATION

Attenuator **M347002** is intended for use both in general purpose equipment and in on-board equipment in frequency range $F_0 = 80\text{--}150$ GHz.

In operating frequency band ($F_0 \pm 5$ GHz) at zero current initial loss in attenuator is no more than 1.0 dB, and when current flows through *p-i-n*-diodes it is provided microwave power attenuation up to 40 dB. Microwave CW input power handling is not less than 1.5 W.

DESCRIPTION

The attenuator is made in a waveguide insert form. Control current feeds *p-i-n*-diodes through coaxial connector of CP-50-112Φ type or SMA type with metric or an inch thread (on request of a customer).

Silicon unpackaged *p-i-n*-diodes with *i*-layer of 350 μm thick, made in RI "Orion", are used in the attenuators.



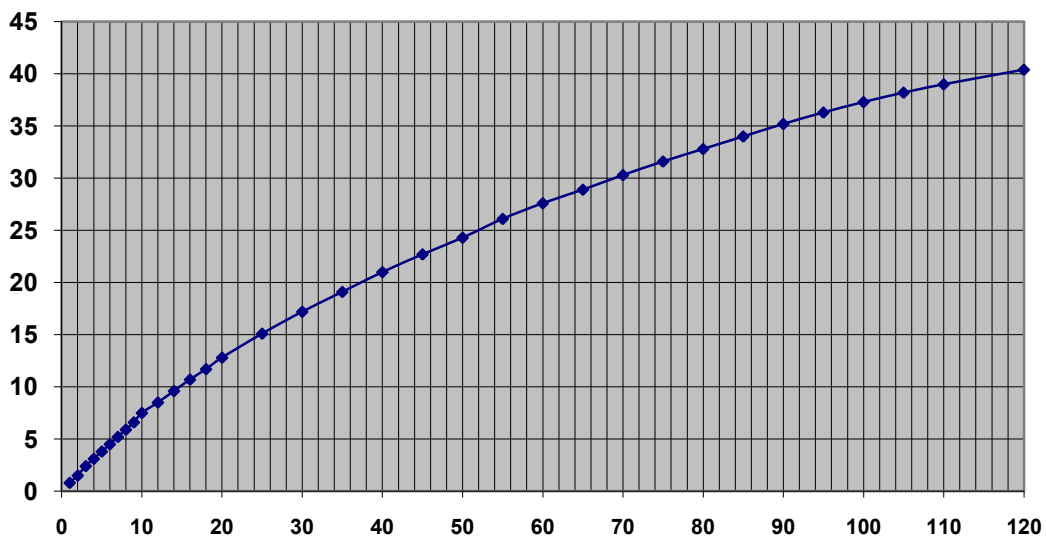
SPECIFICATIONS

Central operating frequency, F_0 , * GHz	80–150
Operating frequency band, GHz	$F_0 \pm 5$
Initial attenuation (at zero control current), dB, no more	1.0
Microwave power attenuation (at control current of 120 mA), dB, not less	40
Input VSWR, no more	2.5
Switching time, μ sec, no more	25
Microwave power handling at the input (continuous), W	1.5
Admissible reverse voltage, V, no more	100
Type connecting waveguide flanges according to ГOCT 13317-89	
Attenuator weight, g, no more	20

* F_0 value is specified by a customer.

CHARACTERISTICS

Microwave power attenuation level, dB, as a function of control current, mA





OUTLINE DRAWING

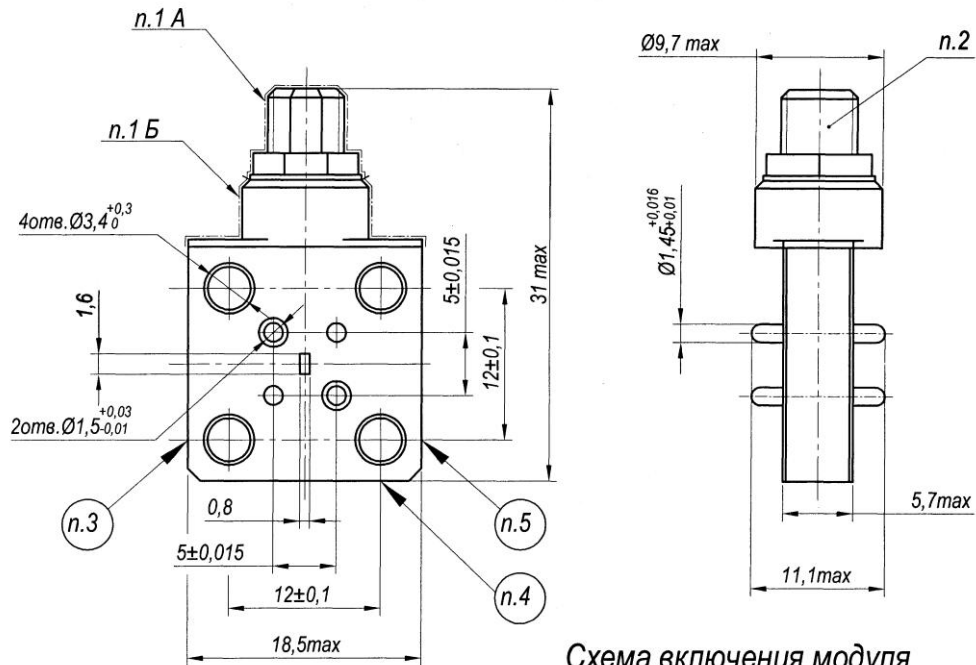
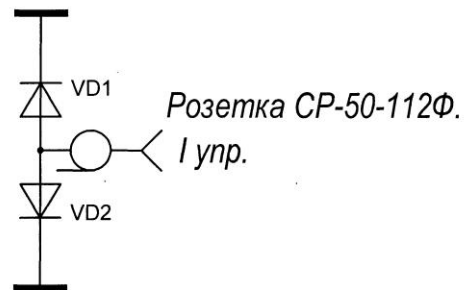


Схема включения модуля



1. Покрывтие поверхн. Б - никель, поверхн. А - серебряное, остальное - золотое.
2. Розетка приборная CP-50-112Ф ОЮ0.364.032 ТУ.

1. Covering of surface B – nickel, surface A – silver, rest – gold.
2. Instrument connector CP-50-112Ф ОЮ0.364.032 ТУ.