

DESIGNER KIT

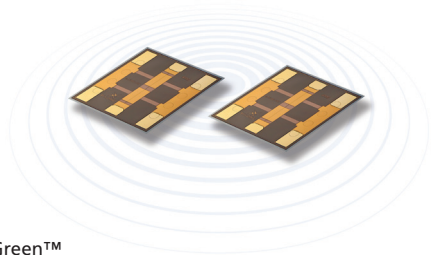
Fixed Attenuator Pads

ATN3590

Fixed Attenuator Pads: ATN3590

Features

- Flat frequency response to 40 GHz
- Return loss >16 dB to 40 GHz
- Available at 0–10, 12, 15, 20, 30 dB
- Power handling to 2 W CW
- Fixed value absorptive devices in die configuration
- Available lead (Pb)-free, RoHS-compliant, and Green™


















Description

The ATN3590 family of fixed resistive attenuators are integrated circuits comprising thin film resistors and through-die vias that provide excellent attenuation flatness from low frequency to 40 GHz or higher. These attenuators are available from 0 to 30 dB.

The ATN3590 attenuator family is optimized for surface mounting on co-planar waveguide or microstrip printed circuit boards. Bond wires or ribbons are used to connect the input and output ports of the attenuators to the external circuit transmission lines.

Connection to ground is accomplished by through-die vias to the die backside metallization. The dice are attached using eutectic solder or conductive epoxy and can operate over a temperature range of -65 °C to 150 °C.

Fixed Attenuator Pads

Part Number	Nominal Attenuation (dB)	Attenuation Tolerance @ DC (dB)	Attenuation Flatness				Return Loss			
			DC-12 GHz (dB)	12-26 GHz (dB)	26-33 GHz (dB)	33-40 GHz (dB)	DC-12 GHz (dB)	12-26 GHz (dB)	26-33 GHz (dB)	33-40 GHz (dB)
 ATN3590-00	0	0.25	±0.15	±0.15	±0.20	±0.20	28	24	20	16
 ATN3590-01	1	±0.20	±0.15	±0.15	±0.20	±0.20	28	24	20	16
 ATN3590-02	2	±0.20	±0.15	±0.15	±0.20	±0.20	28	24	20	16
 ATN3590-03	3	±0.20	±0.15	±0.15	±0.20	±0.20	28	24	20	16
 ATN3590-04	4	±0.20	±0.15	±0.15	±0.20	±0.20	28	24	20	16
 ATN3590-05	5	±0.20	±0.15	±0.15	±0.20	±0.20	28	24	20	16
 ATN3590-06	6	±0.40	±0.15	±0.15	±0.20	±0.20	28	24	20	16
 ATN3590-07	7	±0.40	±0.15	±0.15	±0.20	±0.20	28	24	20	16
 ATN3590-08	8	±0.40	±0.15	±0.15	±0.20	±0.20	28	24	20	16
 ATN3590-09	9	±0.40	±0.20	±0.20	±0.25	±0.30	28	24	20	16
 ATN3590-10	10	±0.40	±0.20	±0.20	±0.25	±0.50	28	24	20	16
 ATN3590-12	12	±0.40	±0.20	±0.20	±0.30	±0.50	28	24	20	16
 ATN3590-15	15	±0.40	±0.20	±0.20	±0.50	±0.75	28	24	20	16
 ATN3590-20	20	±1.0	±0.20	±0.20	±0.75	±1.0	28	24	20	16
 ATN3590-30	30	±1.0	±0.20	±0.25	±0.75	±2.5	28	24	20	16



Skyworks Green™ products are lead (Pb)-free, Restriction of Hazardous Substances (RoHS)-compliant, conform to the EIA/EICTA/JEITA Joint Industry Guide (JIG) Level A guidelines, and are free from antimony trioxide, and brominated flame retardants.