

EWA30xxYA

November 2009 – Rev 3
Development

Features

- Fixed levels: 0, 2, 3, 6, and 10 dB
- Broadband Response: 0 to 30 GHz
- Excellent Return Losses: 15 dB typical
- Flat Attenuation Response
- On-Chip Ground Via
- Power Handling: 20 dBm
- Package Size: 2 x 2mm, 6 lead, plastic air cavity DFN
- 100% RF and DC tested
- Also available in bare die format
- RoHS Compliant

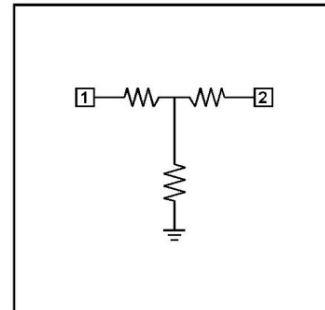
Device Photo



Description

The Endwave *EWA30xxYA* is a fixed broadband GaAs attenuator MMIC with excellent return losses and very flat attenuation. The device has ground signal ground coplanar interfaces. This device can be used for a wide range of applications from defense electronics to commercial communication systems. All parts are 100% DC and RF tested and visually inspected to IPC-A-610.

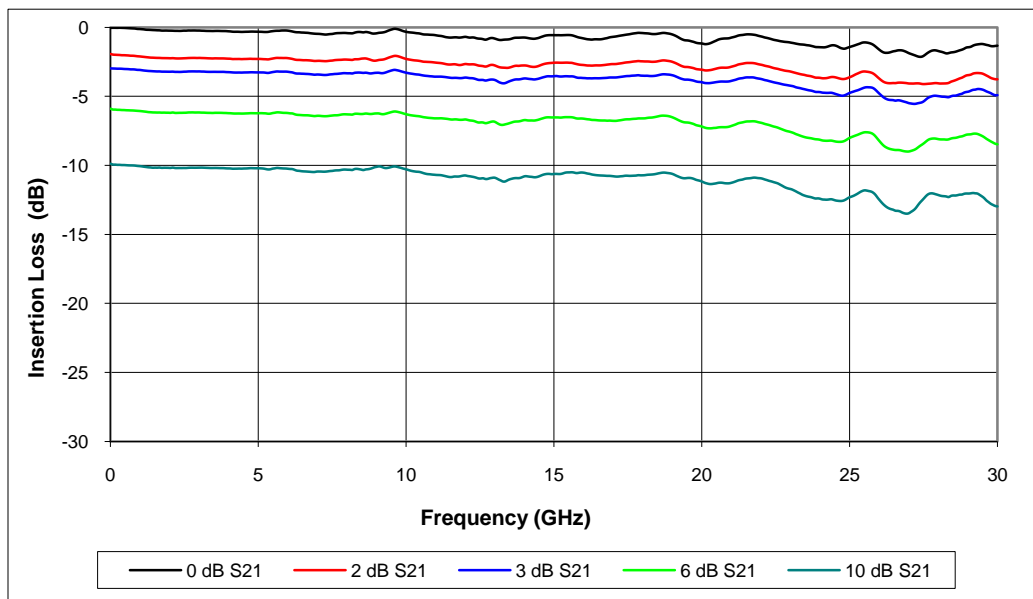
Functional Diagram



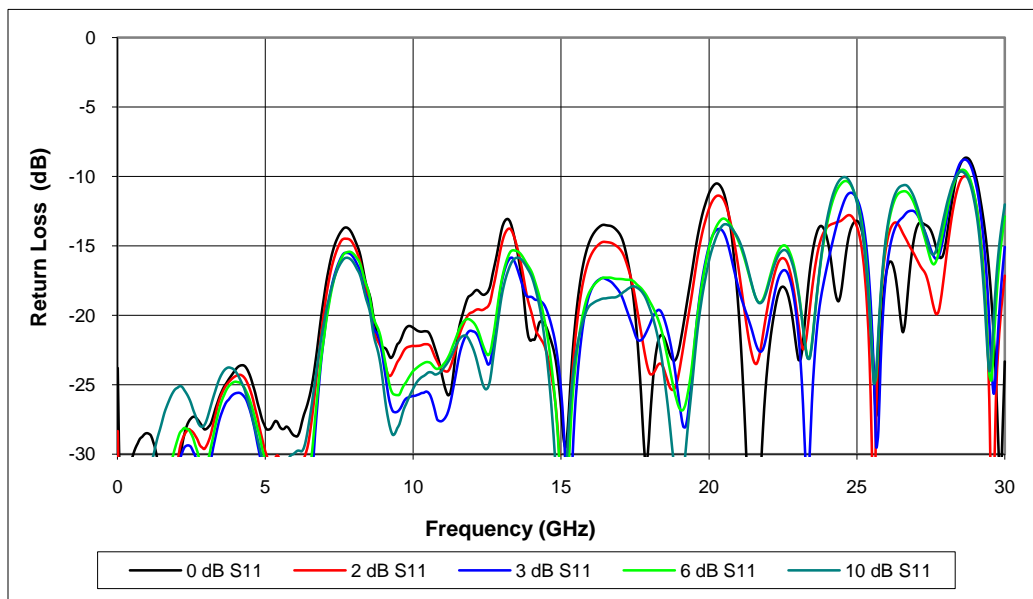
Electrical Characteristics (Temperature = +25 °C)

Parameter	Min.	Typ.	Max.	Units
Frequency Range	0		30	GHz
Insertion Loss @ 15 GHz				
EWA3000YA (0 dB attenuation)		0.5		dB
EWA3002YA (2 dB attenuation)		2.4		dB
EWA3003YA (3 dB attenuation)		3.4		dB
EWA3006YA (6 dB attenuation)		6.5		dB
EWA3010YA (10 dB attenuation)		10.6		dB
Input Return Loss		15		dB
Output Return Loss		15		dB
Power Handling		20		dBm

Insertion Loss vs. Frequency



Return Loss vs. Frequency



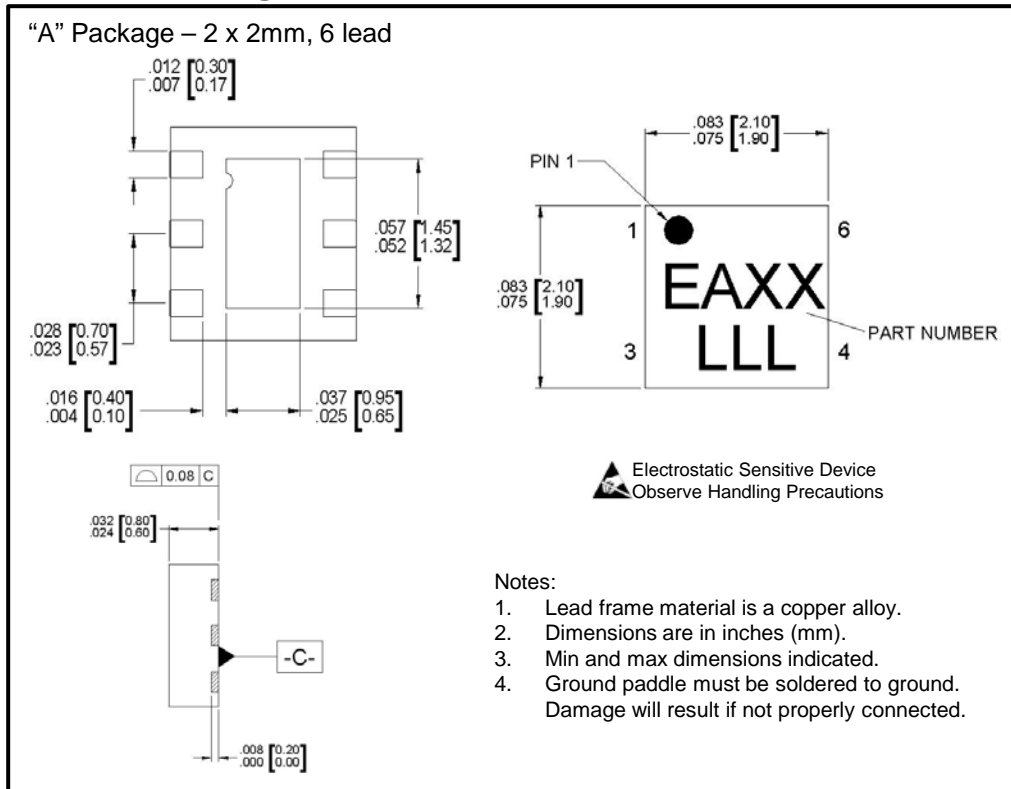
Absolute Maximum Rating

RF Input Power (CW)	+28 dBm
Storage Temperature	-65° to +150°C
Operating Temperature	-55° to +85°C

DC & RF Pinout

1, 3, 4, 6 and paddle	GND
2	RF input
5	RF Output

Outline Drawing



Support Documentation

Support documentation including Assembly Notes, Application Notes and Qualification Procedures can be found on our website at www.endwave.com.

Ordering Information

All devices are in a RoHS compliant DFN “A” package

Part Number	Description
EWA3000YA	0 dB Attenuator
EWA3002YA	2 dB Attenuator
EWA3003YA	3 dB Attenuator
EWA3006YA	6 dB Attenuator
EWA3010YA	10 dB Attenuator

Also available as bare die.

Please see the data sheet for EWA65XXZZ.