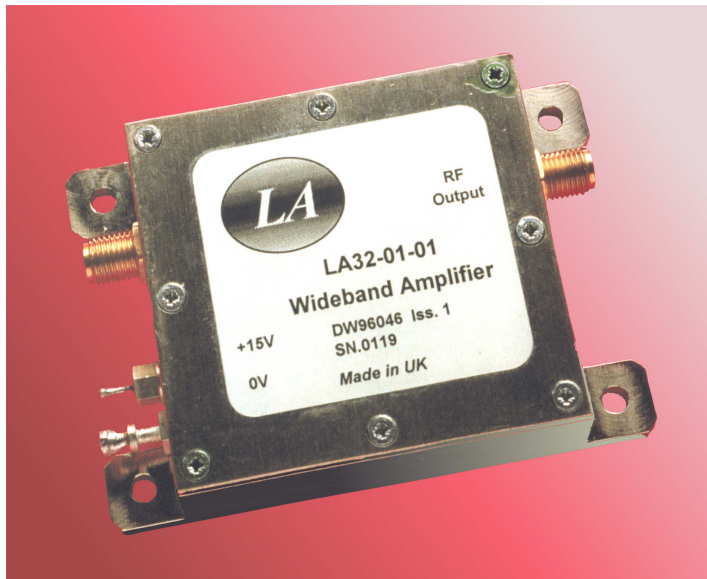




LA Techniques Ltd

**LA32-01-01
VERY WIDE BAND POWER AMPLIFIER**



The LA32-01-01 is a power amplifier intended for use in applications requiring large bandwidths. It employs special circuit techniques to allow the use of surface mount technology (SMT) construction. Efficient SMT automated assembly provides a low cost solution for many high power, wideband applications.

- 30 kHz - 5 GHz Bandwidth
- +23 dBm Output power
- Good pulse performance
- All SMT construction
- Low cost

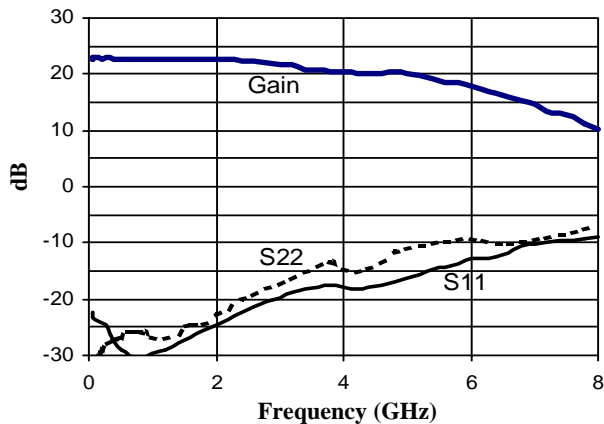
Electrical Specification

($t_{\text{case}} = 30^{\circ}\text{C}$)

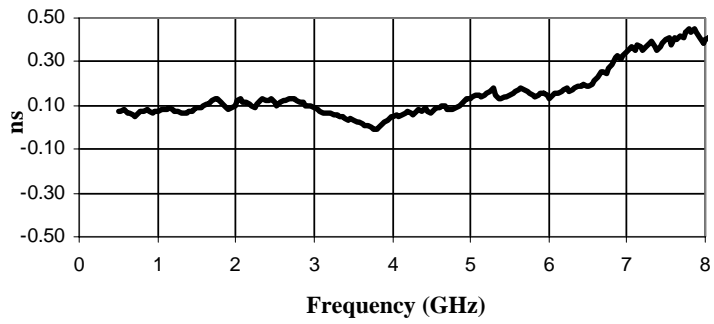
Parameter	Units	Min	Typ	Max
Bandwidth				
Low frequency 3 dB point	kHz	-	30	50
High frequency 3 dB point	GHz	4.5	5	-
Gain	dB	18	21	25
Gain ripple				
100 kHz - 5 GHz	dB	-	± 1	± 2
Input VSWR	-	-	2:1	3:1
Output VSWR	-	-	2.2:1	3:1
Output power (< 4 GHz)				
1 dB gain compression	dBm	21	22	-
saturated	dBm	-	23	-
Group delay (10 MHz - 6 GHz)	ps	-	± 60	-
Noise figure (100 MHz - 6 GHz)	dB	-	7	-
Pulse characteristics				
Rise time	ps	-	70	-
Fall time	ps	-	70	-
Droop (time < 100 ns)	%	-	2	-
Supply voltage	V	13	15	18
Supply current	mA	-	310	330
Operating temperature range	$^{\circ}\text{C}$	-10	-	+70

Note: All parameters to $f < 5$ GHz unless stated otherwise

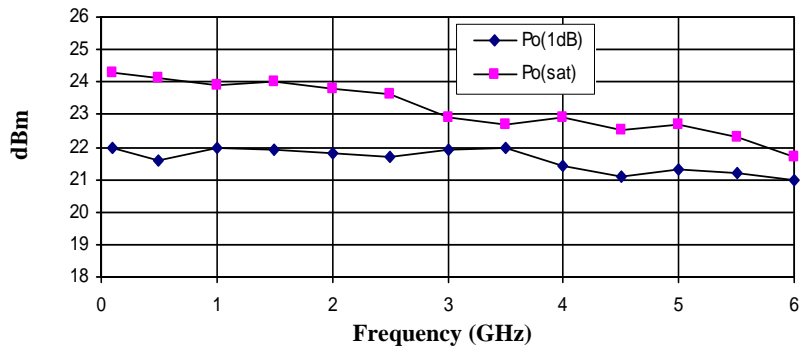
LA32-01-01 Frequency Response



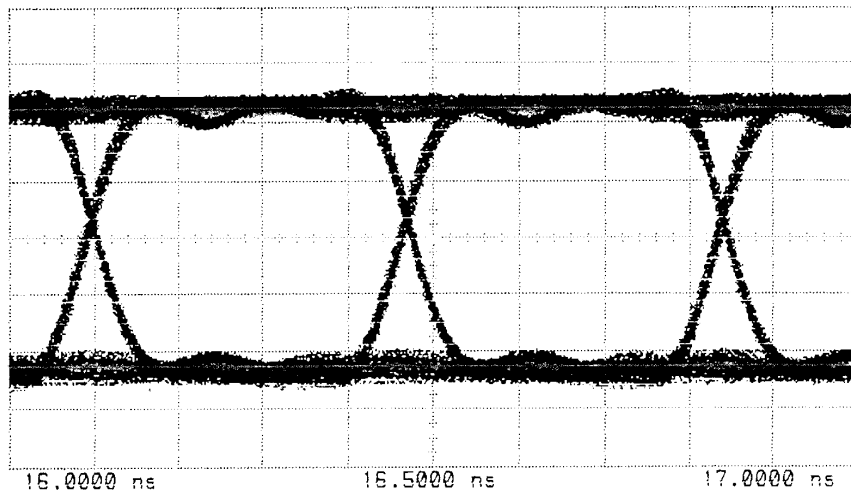
LA32-01-01 Group Delay Ripple



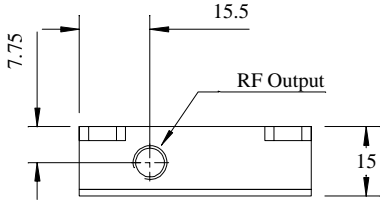
Output Power



2.6 Gb/s Eye Diagram

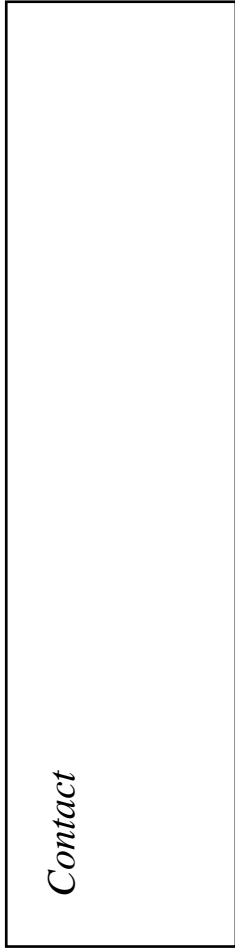
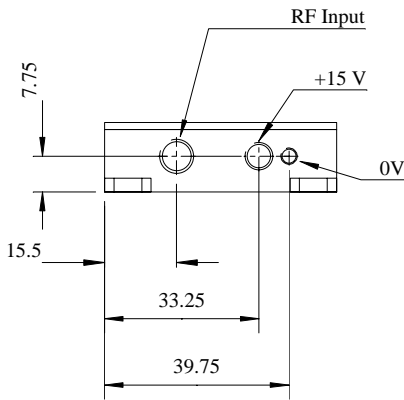
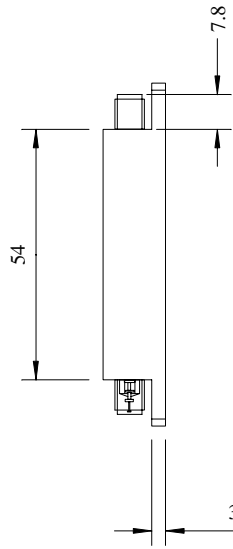
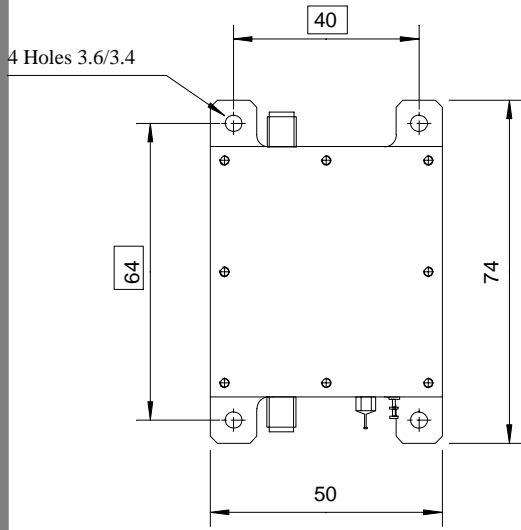


Time: 100 ps/div Volts: 1.6 v/div



LA32-01-01
 Dimensions in mm
 Finish is nickel plating

DW96024_3_Apr 10



Manufactured in the UK
 Specification subject to change without notification



LA Techniques Ltd
 Chancerygate Business Centre, Unit 5,
 Red Lion Road, Surrey KT6 7RA, UK