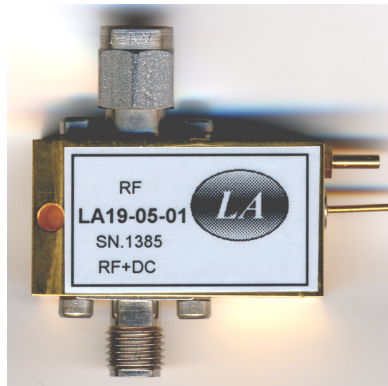




## *LA Techniques Ltd*

**LA19-05-01  
50 kHz - 40 GHz Bias-T**



The LA19-05-01 is a broad band dc bias insertion tee. It is intended to pass high speed digital signals with little distortion. It provides a well controlled response extending from 50 kHz to over 40 GHz. It provides a pulse rise time of less than 10 ps and is able to support a maximum dc current of up to 200 mA. The LA19-05-01 is ideally suited for 40 Gb/s systems and other broad band applications

- 50 kHz - 40 GHz Bandwidth
- <10 ps Rise time
- 200 mA Current capability
- Good pulse performance
- Field Replaceable Connectors
- Small size, 16 x 30 mm, excluding connectors

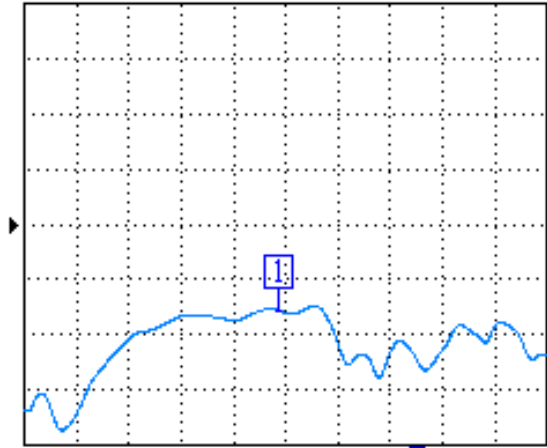
## Electrical Specification

T<sub>case</sub> = 25°C

Parameter	Units	Min	Typ	Max
Bandwidth				
Low frequency 3 dB point	kHz	-	50	80
High frequency 3 dB point	GHz	40	-	-
Rise time (10–90%)	ps	-	10	-
Insertion loss				
100 kHz – 100 MHz	dB	-	0.5	0.8
100 MHz – 12 GHz	dB	-	0.8	1.0
12 GHz – 40 GHz	dB	-	2.0	3.0
Return loss	-			
100 KHz – 12 GHz	dB	12	16	-
12 GHz - 40 GHz	dB	10	12	-
dc Current	mA	-	-	200
RF through capacitance	nF	180	-	-
dc voltage	V	-	-	16
Injection inductance	μH	150	-	-
Inductance resistance	Ω	-	-	12
RF Power (100 KHz – 10 GHz)	W	-	-	3

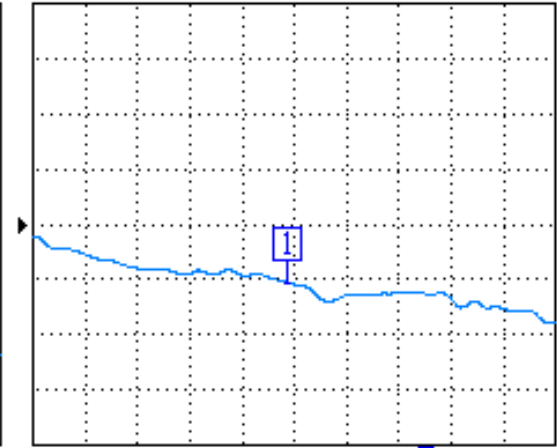
## Typical Measured Characteristics

S11 REFL LOG MAG.  
▶0.000 dB 10.000 dB/DIU



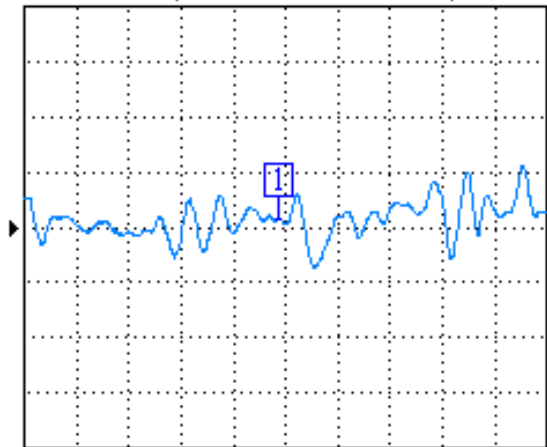
0.040000000 GHz 40.000000000

S21 TRANS LOG MAG.  
▶0.000 dB 1.000 dB/DIU

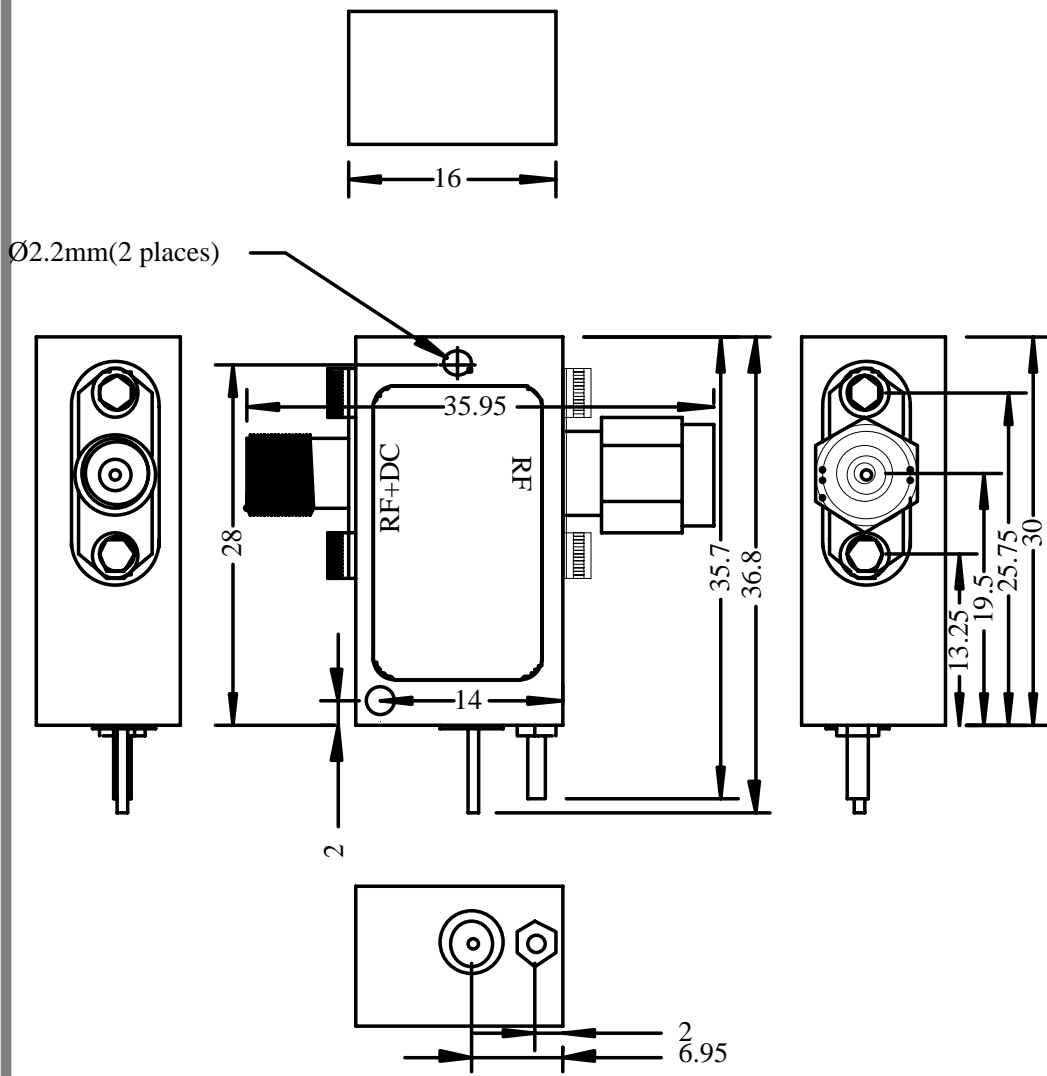


0.040000000 GHz 40.000000000

S21 TRANS GRP DLY  
▶134.000 ps 5.000 ps/DIU



0.040000000 GHz 40.000000000



*Contact*



LA Techniques Ltd  
 Chancerygate Business Centre, Unit 5  
 Red Lion Road, Surrey KT6 7RA, UK  
[www.latechniques.com](http://www.latechniques.com)