

## FEATURES:

- 0.5 GHz ~ 2.5 GHz;
- 0.5 dB Insertion Loss;
- 50 Volt DC Rating;
- RoHS Compliant.

## APPLICATIONS:

- Cellular;
- GPS;
- PCS, 3G.



# LBST05002500A, 0.5 GHz ~ 2.5 GHz WIDE BAND BIAS-T

## ELECTRICAL SPECIFICATIONS @ 21 °C

Symbol	Parameter	Test Constraints	Unit	Min	Typical	Max
S <sub>21</sub>	Insertion Loss	0.5 GHz ~ 2.5 GHz, RF to RF + DC	dB		0.5	0.8
SWR <sub>1,2</sub>	VSWR	0.5 GHz ~ 2.5 GHz, RF and RF + DC	:1		1.22	1.25
SWR <sub>3</sub>	VSWR	DC ~ 10 MHz, DC	:1		1.22	1.5
S <sub>32</sub>	Insertion Loss	DC ~ 10 MHz, DC to DC + RF	dB		0.5	0.8
S <sub>13</sub>	Isolation	DC ~ 10 MHz, DC to RF	dB	20		
S <sub>32</sub>	Isolation	0.5 GHz ~ 2.5 GHz, DC to DC + RF or RF	dB	40		
V	Voltage	Any port	V			50
I <sub>dd</sub>	Current Consumption	V <sub>dd</sub>	A			1.0
P <sub>IN, MAX</sub>	Maximum CW RF Power	0.5 – 2.5 GHz, RF to RF + DC	W			20
Z <sub>0</sub>	Impedance	0.5 – 2.5 GHz	Ohm		50	

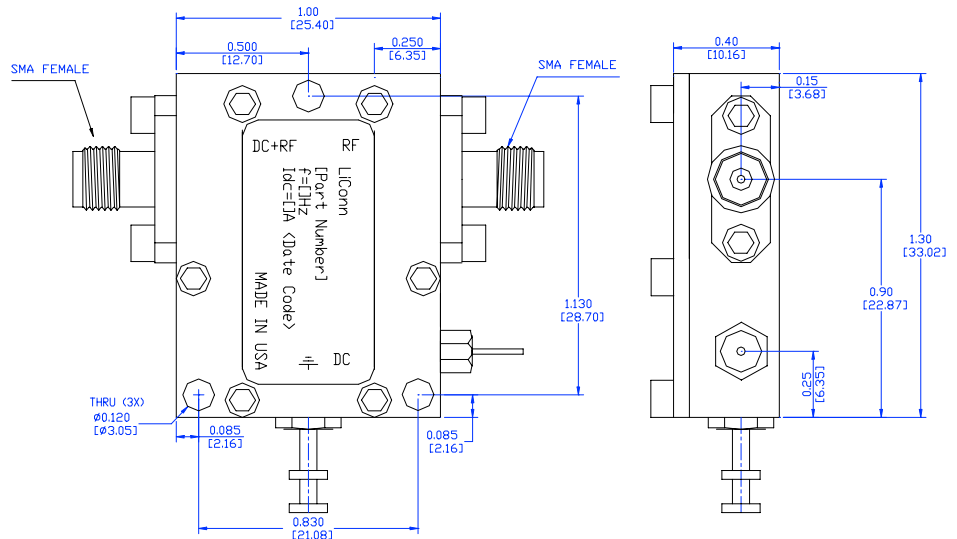
## ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

Parameters/Conditions	Unit	Maximum
Channel Temperature	°C	+150
CW RF Power	W	200
DC Current	A	1.0
DC Supply Voltage	V	50
Operating Temperature	°C	-40 ~ +85
Storage Temperature	°C	-65 ~ +125

[1] Operation beyond these limits may cause permanent damage.

Preliminary

## MECHANICAL OUTLINE



## ORDERING INFORMATION: LBST05002500A

Unit: INCH Base Material: Aluminium Alloy 6061  
 [mm] Finish: RoHS Compliant Conductive Plating  
 Tolerance: X.XXX ±0.005"  
 X.XX ±0.01"

**Heat Sink Required For CW High Power Application!**