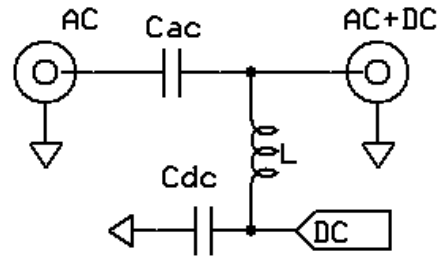




# Models BT-HF & BT-UHF

## BIAS TEEs



A Bias Tee is used to either insert or extract DC power to / from a coaxial cable. It can be used to send dc power up a cable to an antenna mounted pre-amp or coax relay. The KH6HTV Video Model BT-HF is a Bias Tee with a useful frequency response covering from 7 to 350 MHz with less than 0.5 dB insertion loss. The Model BT-UHF has a useful frequency response covering from 2m to 13cm bands (144 MHz to 2.4 GHz). They are rated to 50 Vdc and 2 Amps.

### BT-UHF Typical Performance

Parameter	"S"	144MHz	430MHz	915MHz	1.27GHz	2.4GHz
Insertion Loss	S21	0.35dB	0.1dB	0.2dB	0.3dB	0.5dB
Return Loss	S11	12dB	>20dB	>20dB	17dB	15dB

Parameter	Value	Notes
Capacitors	100 pF & 0.1 uF (UHF) 2.7 nF & 0.1 uF (HF)	DC block Cac & DC by-pass Cdc
Inductor	80 nH (UHF), 1.5uH (HF)	shunt inductor
Low Frequency Cut-Off	50 MHz (UHF) 2.5 MHz (HF)	S21 = -3 dB
Resonances	230 MHz & 3 GHz (UHF) 415, 670 & 890 MHz (HF)	-1.5 dB & -7 dB notches -1.5, -2.7 & -1dB (HF)
Max. RF Power	TBD	see below note
DC Ratings	50 Vdc & 2 Amps dc	
RF Connectors	SMA	female, jacks
DC Connector	feed-thru capacitor	solder terminal
Dimensions	1.5"x3.6"x1.25"	die-cast enclosure

Note: The UHF prototype has been tested successfully with: 50 W (2m), 20 W (70cm), 35 W (23cm) & 10 W (13cm).  
These were the max. powers available at the time in the test labs

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