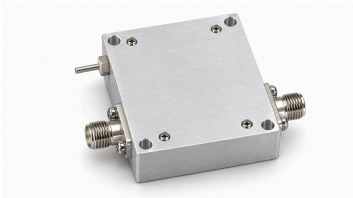
6–9 GHz RF Bias Tee



LCBT-6000-9000 carries the RF signal and injected DC bias through a common output over 6–9 GHz. It is intended for RF and microwave test systems and laboratory measurements that require simultaneous RF transmission and DC bias injection.

The RF input and combined RF/DC output use SMA-K female connectors. Insertion loss is 1 dB typical and operating current is 0.3 A typical. +30 V operating voltage and +35 dBm input power are absolute maximum ratings: stress limits rather than common test conditions for the specifications.

Electrical specifications

Parameter	Value	Unit
Frequency range	6000–9000	MHz
Insertion loss	1 (Typical)	dB
Input/output reflection (S11)	−15 (Typical)	dB
Operating voltage [1]	5 / 12; ≤30	V
Operating current	0.3 (Typical)	A

[1] Typical: 5/12 V. Maximum: 30 V.

Absolute maximum ratings

Parameter	Value	Unit
Maximum operating voltage [1]	+30	V
Maximum input power [2]	+35	dBm
Operating temperature [3]	−40–+70	°C
Storage temperature [4]	−40–+85	°C

[1] Maximum: 30 V.
[2] Maximum: 35 dBm.
[3] Maximum: 70 °C.
[4] Maximum: 85 °C.

Mechanical specifications

Parameter	Value
RF input connector	SMA-K — Female
RF and DC output connector	SMA-K — Female; RF and DC output
DC input interface	DC supply interface

Document notice

Specifications are subject to revision. Before design release, confirm the current document revision and product-specific requirements with LCRF. The approved quotation and order documentation define the supplied configuration.