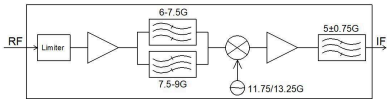


6–9 GHz Downconverter with 5 GHz IF

Selectable-band RF downconverter with 30 dB typical conversion gain and 2.5 dB maximum noise figure. Typical source value; not a guaranteed no-damage limit. Typical: 33 dBm.



Electrical specifications

Parameter	Value	Unit	Notes
RF input frequency	6–9	GHz	-
IF output frequency	5±0.75	GHz	-
Downconversion gain	30	dB	Typical: 30 dB.
Downconversion noise figure	2.5	dB	Maximum: 2.5 dB.
Saturated output power (Psat)	12	dBm	Typical: 12 dBm.
Leakage level / source rejection value	–40	dBc	Retain the negative source value; its rejection convention is unconfirmed. Typical: -40 dBc.
Supply voltage	+5	VDC	Stated +5 V supply; 6 V maximum. No typical qualifier is inferred. Maximum: 6 VDC.
Supply current	400	mA	Typical: 400 mA.
Internal LO frequency	11.75 / 13.25	GHz	-
Input power without damage	33	dBm	Typical source value; not a guaranteed no-damage limit. Typical: 33 dBm.

Environmental limits

Parameter	Value	Unit
Operating temperature	–40–+70	°C
Storage temperature	–40–+85	°C

Interfaces and contacts

Parameter	Value	Unit
Signal connectors	SMA (Source labels disagree; confirm physical RF/IF mapping before connection.)	-
Power and control connector	PHD-2×5AWD	-
Supply contacts	1, 2: +5 V	-
Ground contacts	3, 4: GND	-

Control and filter selection

Parameter	Value	Unit
Filter selection, pin 5 low	0 V → 6–7.5 GHz	-
Filter selection, pin 5 high	+3.3 / +5 V → 7.5–9 GHz	-

Mechanical specifications

Parameter	Value	Unit
Body dimensions	110±0.05 × 63±0.05 × 16±0.05	mm
Mounting-hole center spacing	105.6±0.1 × 58.6±0.1	mm
Mounting holes	4 × Φ2.2	mm

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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.