

Solid State Personal Communication Power Amplifier

HD34014

174-240MHz / 30Watts Multi-Carrier

- DAB RF Amplifier
- Solid-state linear design
- Small and lightweight
- 50 ohm input/output impedance
- High reliability and ruggedness
- Built in monitoring and Gain Control

ELECTRICAL SPECIFICATIONS @ +48 VDC, 25°C, 50 Ω System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	174		240	MHz
Small Signal Gain	G _{ss}	46	47	48	dB
Gain Flatness	Δ G			± 1.0	dB
Output Power @ 20 tone	P _{out}	30			W
IMD	dBc	-40	-45 TBD		dBc
Input Return Loss	S ₁₁			1.5 : 1	
Spurious Signals	Spur			-60	dBc
Operating Voltage	V _{DC}		48		Volt
Supply Current @ P _{OUT} = 30 W	I _{DD}		6.5		Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions	180 x 150 x 25 TBD	mm	Max
Weight	1.5 TBD	Kg	Max
RF Connectors In/Out/-50dB	SMA female		
DC Connectors	D-Sub, 9 Pins, Male		
Cooling	External Heatsink		

ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	T _c	-10		+50	°C
Storage Temperature	T _{stg}	-40		+85	°C
Relative humidity (non-condensing)	RH			95	%

PROTECTIONS

Input Overdrive	+6 dBm	Max
Over Power Shutdown	47 dBm	Nom
Load VSWR @ 10W output power	∞ @ all load phase & amplitude	Nom
Thermal Overload	90°C shutdown	Nom



