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Specification

1. Item

Product	87~250MHz 20W Solidstate Amplifier
Partnumber	ESM-0087-43-50

2. Revision History

Issued / Revision	R&D Approved	Revision Detail

Specification

87~250MHz 20W Solidstate Amplifier

Design	R & D	Approval
		
CYKIM		

Customer:	Date:	Part No.: ESM-0087-43-50

General Specification

No.	Parameter	Specification	Unit
1	Operating Frequency Range	87~250MHz	-
2	Small Signal Gain	49~51dB	-
3	Gain Flatness	±2.5dB	-
4	Output Power @ 1 dB Gain Compression Point	20W min.	-
5	Input Return Loss	1.5 : 1	-
6	Spurious Signals	-60dBc	-
7	Operating Voltage	26~30V	-
8	Supply Current @ POUT = 10 W C.W 2Tone	3.5 TBD max.	-

Mechanical Specification

No.	Parameter	Specification	Unit
1	Dimensions	160*90*25	-
2	Weight	1.5	-
3	RF Connectors In/Out	SMA female	-
4	RF Sampling	RF Output - 50dB, SMA female	-
5	DC Connectors	Dsub, 9 Pins, Male	-
6	Cooling	External Heatsink	-
7	Operating Case Temperature	-10~+50℃	-
8	Storage Temperature	-40~+85℃	-
9	Relative humidity	0~95%	(non-condensing)
10	Input Overdrive	+6dBm max.	-
11	Over Power Shutdown	45dBm	-
12	Load VSWR @ 20W output power	∞ @ all load phase & amplitude	-
13	Thermal Overload	90℃ shutdown	-

Interface Connector D-sub 9Pin

Pin No.	Description	Specifications
1	Forward Power Monitor	Continuous Analog voltage relative to forward power via RMS detector FWDM: 15 ~ 45 dBm @ 0 ~ 5 V (100 mV/dB) 40dBm output = VFWD = 4.0 VDC
2	Reverse Power Monitor	Continuous Analog voltage relative to reflected power via RMS detector REVM: 15 ~ 45 dBm @ 0 - 5V (100 mV/dB) 40dBm output = VREV = 4.0 VDC
3	Temp Monitor	Vo = 10mV/℃+500mV
4	Gain Control	Continuous adjustable range via analog input levels Setting Point (ASP): 20(0V) ~ 50 dB(5V) Error Range (AER): ±1.5 dB Response Time (ART): 100 mS/dB
5	Mute	Amplifier Enable: TTL “Low” or Open Amplifier Disable: TTL “High”
6	+VDD	+28 ±2 VDC
7	+VDD	+28 ±2 VDC
8	GND	Ground
9	GND	Ground