

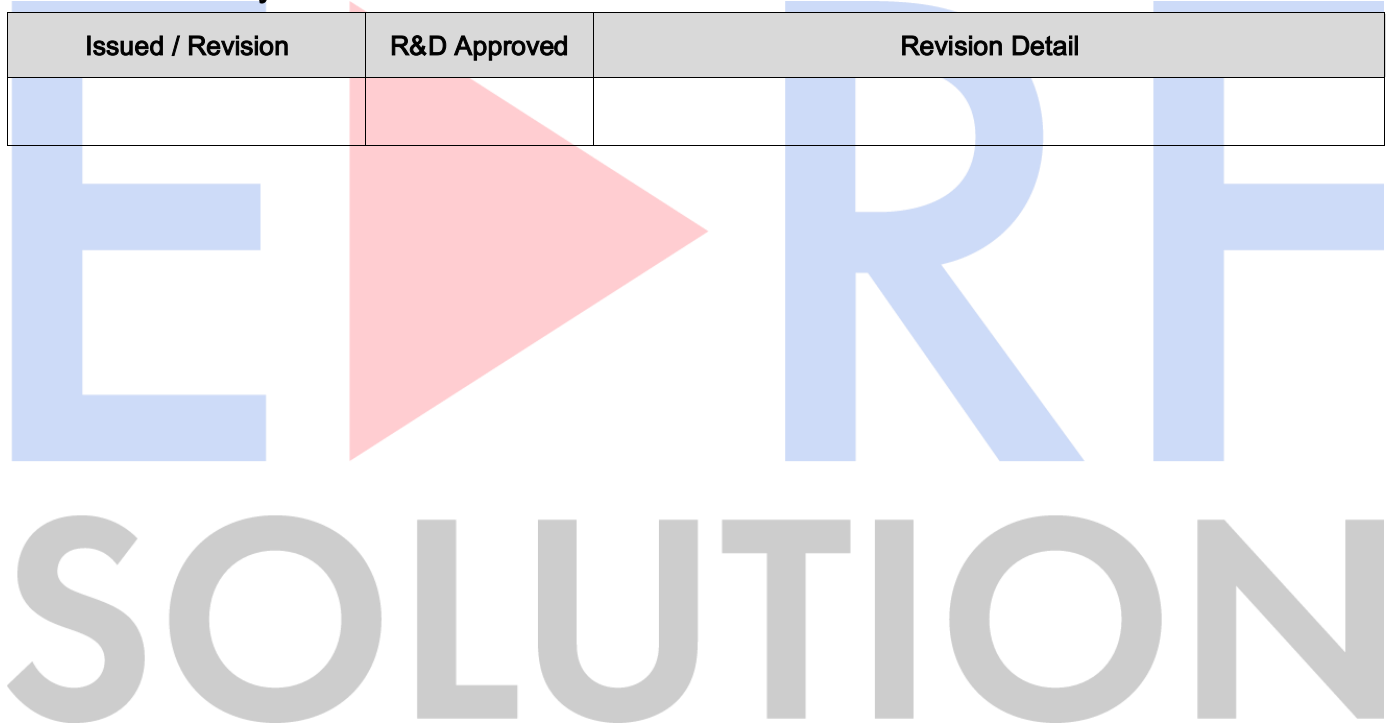
# Specification

## 1. Item

Product	840~870MHz 1W Solidstate Amplifier
Partnumber	ESM-0840-30-45


## 2. Revision History

Issued / Revision	R&D Approved	Revision Detail



# Specification

840~870MHz 1W Solidstate Amplifier

Design	R & D	Approval
		
CYKIM		

Customer:	Date:	Part No.: ESM-0840-30-45
-----------	-------	--------------------------

## General Specification

No.	Parameter	Specification	Unit
1	Operating Frequency Range	840~870MHz	-
2	Output Power @ 1 dB Gain Compression Point	1W min.	-
3	ALC Range	10 min.	-
4	Small Signal Gain	44~46dB	-
5	Gain Flatness (ALC On)	±0.5dB	-
6	Third Order Intercept Point 2-Tones, POUT = 22dBm Avg., = 500 KHz	+50dBm typ.	-
7	Input/Output Return Loss	-14dB	-
8	Harmonics @ P1 dB Gain Compression Point	-40dBc	-
9	Spurious Signals	-70dBc typ.	-
10	Operating Voltage	26~30V	-
11	Supply Current @ P1dB	1.0A TBD	-

## Mechanical Specification

No.	Parameter	Specification	Unit
1	Dimensions	127*95*25	-
2	Weight	1	-
3	RF Connectors In/Out	SMA female	-
4	DC Connectors	Dsub, 9 Pins, Male	-
5	Cooling	External Heatsink	-
6	Operating Case Temperature	-10~+50°C	-
7	Storage Temperature	-40~+85°C	-
8	Relative humidity	0~95%	(non-condensing)
9	Input Overdrive	+10dBm max.	-
10	Load VSWR @ 25W output power	∞ @ all load phase & amplitude	-
11	Thermal Overload	85°C 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: 10 – 40 dBm @ 0 – 5 V (100 mV/dB) 30dBm output = VFWD = 2.5 VDC
2	Reverse Power Monitor	Continuous Analog voltage relative to reflected power via RMS detector REVM: 10 – 40 dBm @ 0 - 5V (100 mV/dB) 30dBm output = VREV = 2.5 VDC
3	NC	-
4	Gain Control	Min Gain < 40dB = 0V, Max Gain 45±1dB= +5V
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
LED	LED Indicator	Output Power > ALC setting

ECHO RF SOLUTION