

LOW NOISE AMPLIFIER 26.5GHZ~40GHZ

UCL-LNA2640-50-18-S SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	26.5		32	32		40	GHz
Gain	50	52		46	50		dB
Gain Flatness		±1.0			±2.0		dB
Gain Variation Over Temperature (-45 ~ +85)		±1.5			±3.0		dB
Noise Figure		2.0	3.0		3.0	4.0	dB
Input VSWR		1.8			2.5		: 1
Output VSWR		1.8			3.0		: 1
Output 1dB Compression Point (P1dB)	18	21		15	18		dBm
Saturated Output Power (Psat)		22			19		dBm
Output Third Order Intercept (IP3)		25			20		dBm
Isolation S12		-50			-50		dB
Supply Current (Vcc=+12V)		270	400		270	400	mA

Weight	1.76 ounces	Impedance	50ohms
Input / Output Connectors	2.92mm-Female	Material	copper
Finish	Standard: Gold 40 micron; Nickel 220 micron thickness	Package Sealing	Epoxy Sealing (Standard)
	Option: Gold 80 micron; Nickel 180 micron thickness		Hermetically Sealed (Option with extra charge)

Absolute Maximum Ratings

Operating Voltage	+15V
RF Input Power (RFIN)	-25dBm

Biasing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +12V biasing

Power OFF Procedure

Step 1	Turn off +12V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

Environmental Specifications

Operational Temperature	-45°C~+85°C
Storage Temperature	-55°C~+125°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un- controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40°C
Shock	20G for 11msec half sine wave,3 axis both directions

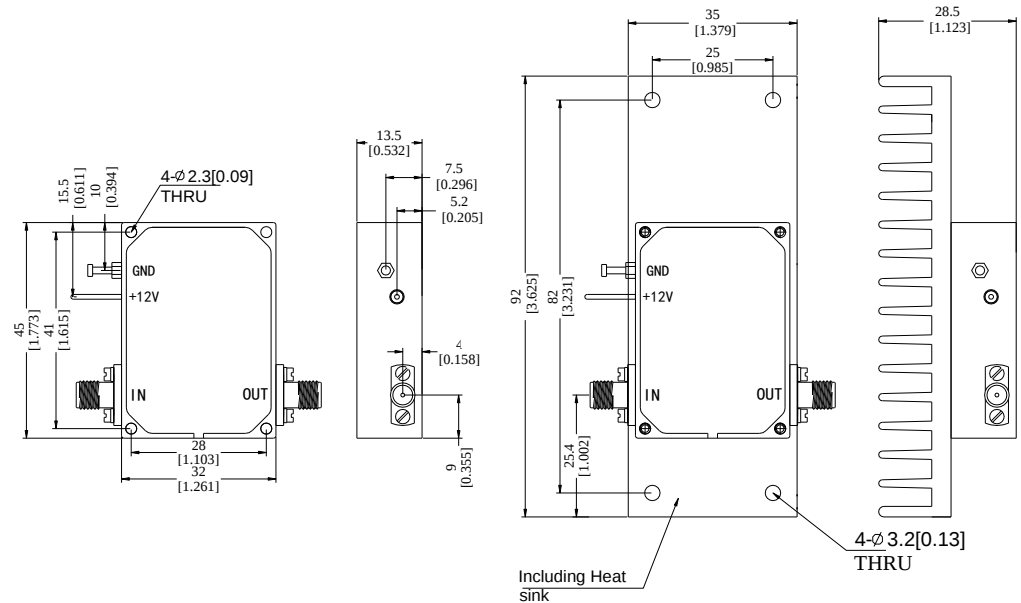
REVISION HISTORY

REV	DESCRIPTION	DATE	APPROVED
A	PRODUCTION		

Outline Drawing:

All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)



Universal Cooperate Ltd.

Web:www.ucl-microwave.com

46 Langham Rd
Edgware,
HA8 9EL The UK

TITLE

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SIZE

A

CAGE CODE

MODEL

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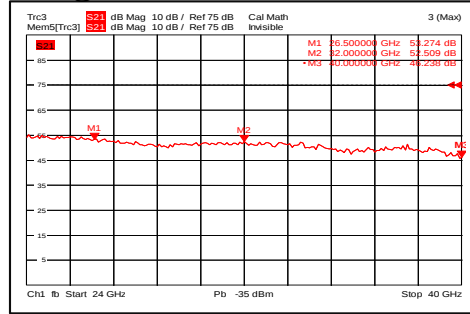
REV

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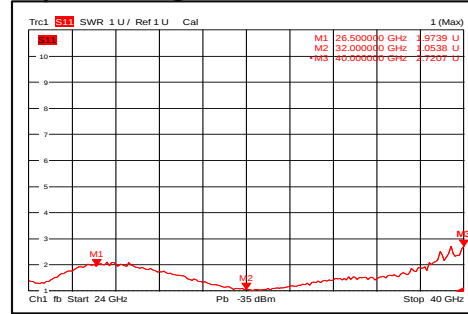
SCALE 1:1

DOC FAMILY

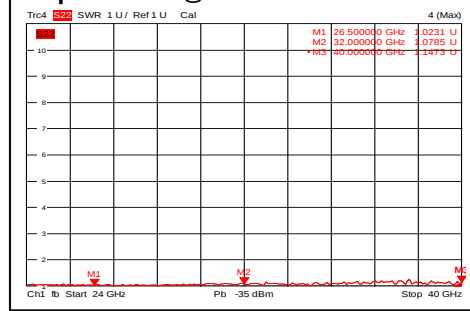
Gain@+25°C



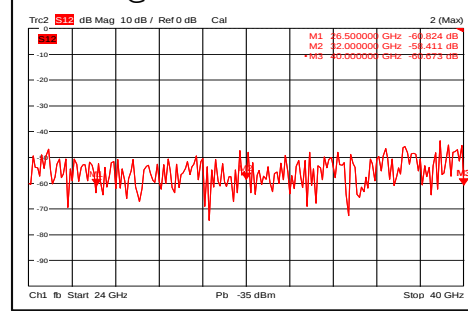
Input VSWR@+25°C



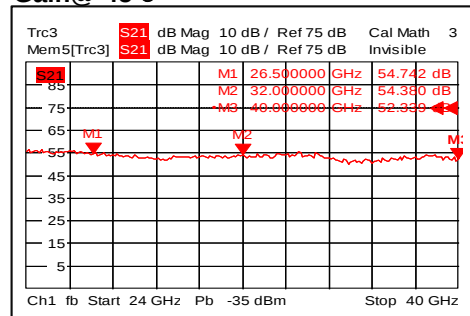
Output VSWR@+25°C



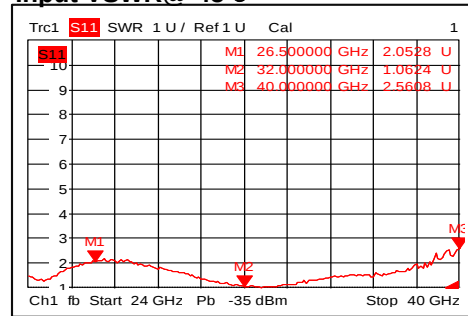
Isolation@+25°C



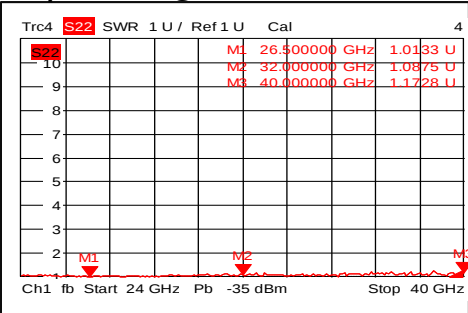
Gain@-45°C



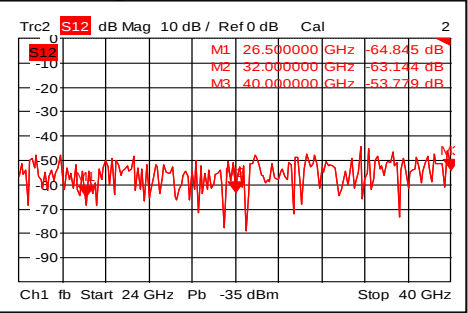
Input VSWR@-45°C



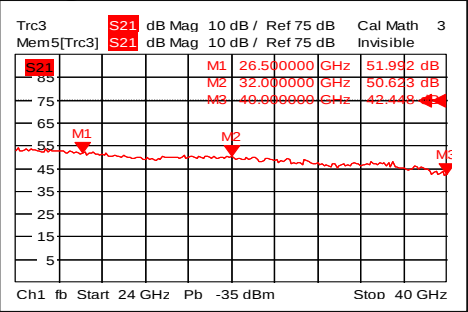
Output VSWR@-45°C



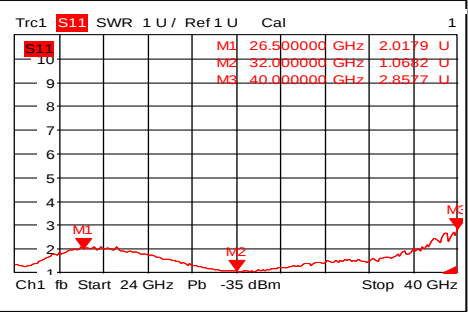
Isolation@-45°C



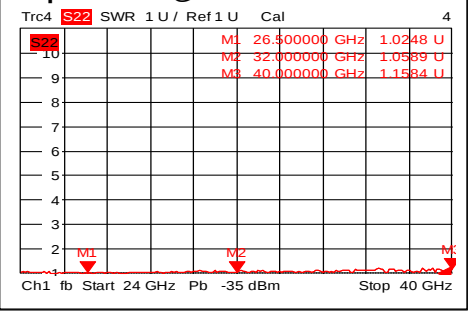
Gain@+85°C



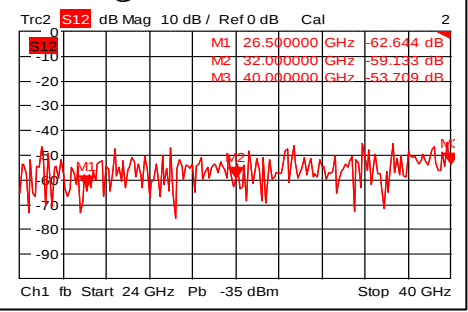
Input VSWR@+85°C



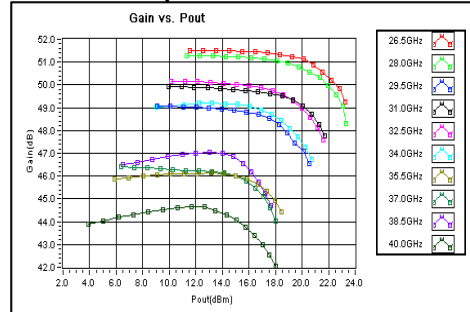
Output VSWR@+85°C



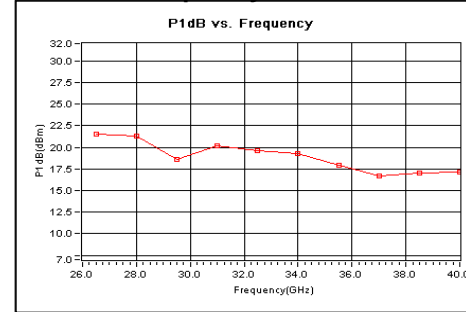
Isolation@+85°C



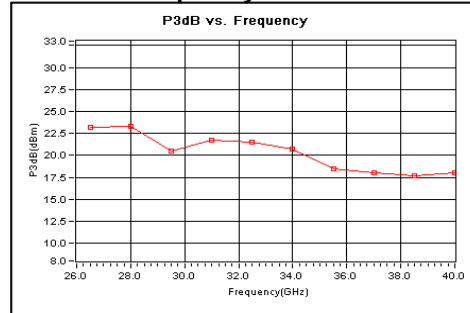
Gain vs. Output Power



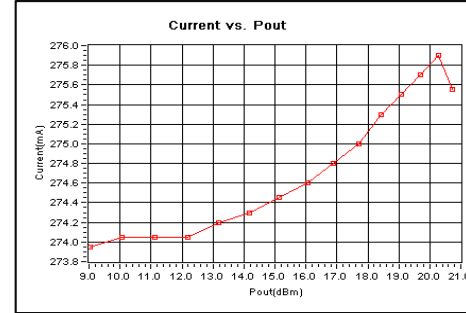
P1dB vs. Frequency



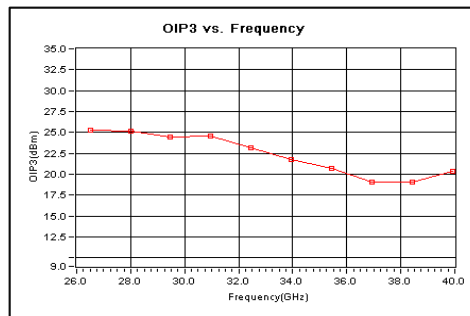
P3dB vs. Frequency



Current



Output Third order Intercept (IP3)



Noise Figure

