

2° Typical Phase Shift over the Dynamic Range • 70dB Dynamic Range
±1dB Output Level Variation over -45°C to +85°C • Single Channel and Matched Channel Models

Pascall's range of constant phase IF limiting amplifiers is designed for applications where phase deviations must be minimised over a wide dynamic range. All models are available as single units, as matched pairs or as triplets. The CPL series IF limiting amplifiers incorporate multiple limiting stages, output filters, buffered output stages and temperature compensation to minimise variations in phase deviations and limited IF output level.



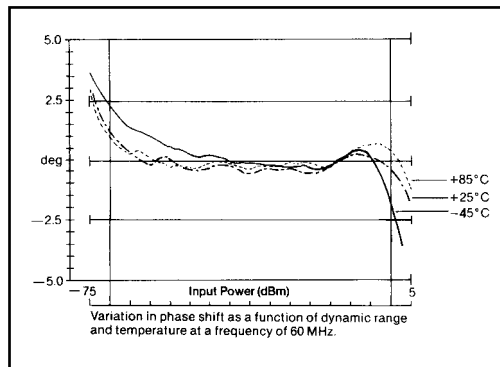
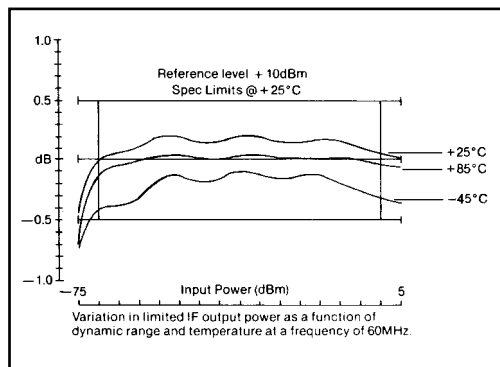
Model No. CPL	Model No. MCPL	Model No. UMCPL	Operating Frequency MHz	Minimum Bandwidth MHz
CPL / MCPL / UMCPL Series				
CPL2105	MCPL2105	UMCPL2105	21.4	5
CPL3010	MCPL3010	UMCPL3010	30	10
CPL6020	MCPL6020	UMCPL6020	60	20
CPL7020	MCPL7020	UMCPL7020	70	20
CPL12020	MCPL12020	UMCPL12020	120	20
CPL16020	MCPL16020	UMCPL16020	160	20
CPL16040	MCPL16040	UMCPL16040	160	40

Additional Specifications

Input dynamic range	CPL	-70 to 0dBm (-65 to 0dBm for 160MHz models)
	UMCPL/MCPL	-70 to -5dBm (-60 to -5dBm for 160MHz models)
Phase shift over dynamic range	CPL	5 deg max
	UMCPL/MCPL	5 deg max 10 deg max above 120MHz
Output Power		+10dBm nominal
Variation over dynamic range	@ +25°C	±0.5dB max
	over operating temperature range 2	±1dB on mean value at +25°C
Phase tracking	@ +25°C	±2 deg for pairs, ±3 deg for triplets
	over -45°C to +85°C	±4 deg for pairs, ±6 deg for triplets
Input/Output VSWR		1.5:1 max
Power requirements		-12V or -15V at 150mA max
Operating temperature ranges:	Range 1	0 to +60 °C
	Range 2	-45 to +85 °C
	Range 3	-55 to +100 °C
	Range 4	Customer specified
Connectors		SMA, SMB or SMC
Weight	CPL	80g (2.8oz) max
	MCPL	65g (2.3oz) max
	UMCPL	57g (2.0oz) max

Optional Features

- Centre frequencies in the range 10-500MHz
- Limited IF output power in range 0 to 10dBm
- Dynamic range to +10dBm
- Positive supply models available



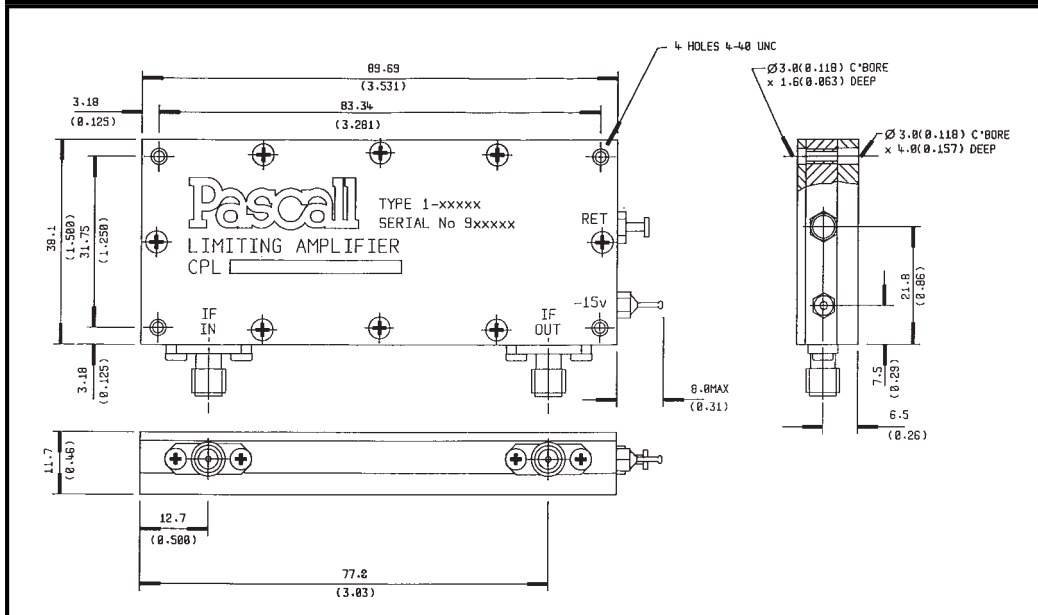
Ordering Information

CPL-XXXXX-XXX-XT

Tracking set (when applicable)	2 = pair 3 = triple
Temperature:	1 = 0 to +60°C 2 = -45°C to +85°C 3 = -55°C to +100°C 4 = Customer specified
Supply Voltage:	1 = -12V or 2 = -15V
Connectors:	A = SMA B = SMB C = SMC
Bandwidth MHz	
Centre Frequency MHz	
Package Style	UMCPL = Ultra miniature MCPL = Miniature CPL = Standard

DIMENSIONS in mm. FINISH Bright tin, generally in accordance with MIL-T-10727 Type 1 Bright.

Constant Phase IF Limiter: CPL Series



Constant Phase IF Limiter: UMCP Series

