

# Linear Detectors

## LLD & VGD Series

**Up to 30dB Dynamic Range • 0.5dB Linearity • Low Noise**

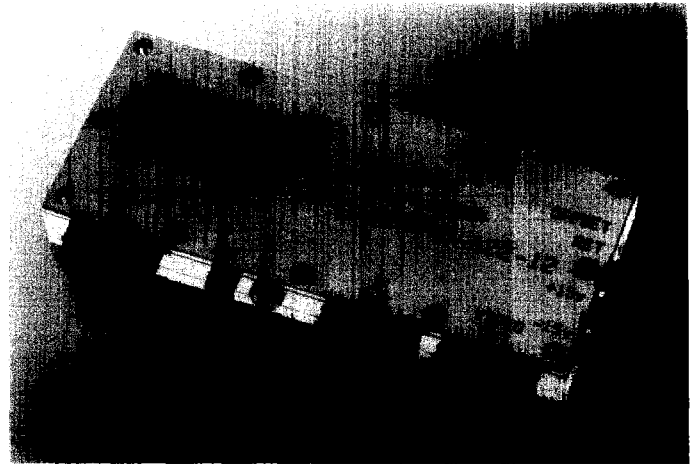
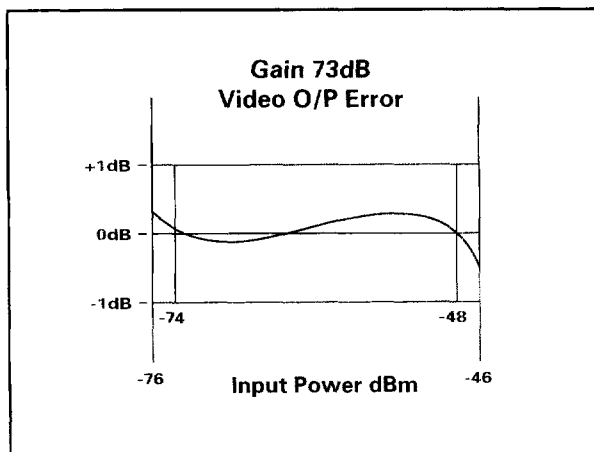
The Pascall LLD and VGD series of linear amplifier/detectors provide low noise linear amplification and high speed detection of IF signals. These amplifiers also provide for either manual or automatic gain control. Amplifiers are available having either DC or AC coupled video and with centre frequencies up to 500MHz.

Model No. LLD	Model No. VGD	Centre Freq. MHz	3dB Bandwidth MHz	IF Gain dB min	Gain to video dB min	Rise-Time nsec max
<b>LLD/VGD Standard Series</b>						
LLD-1002	VGD-1002	10	2	70	80	500
LLD-2105	VGD-2105	21	5	70	80	250
LLD-3010	VGD-3010	30	10	70	80	100
LLD-6010	VGD-6010	60	10	70	80	100
LLD-7015	VGD-7015	70	15	70	80	75
LLD-12020	VGD-12020	120	20	60	70	50
LLD-16040	VGD-16040	160	40	60	70	30

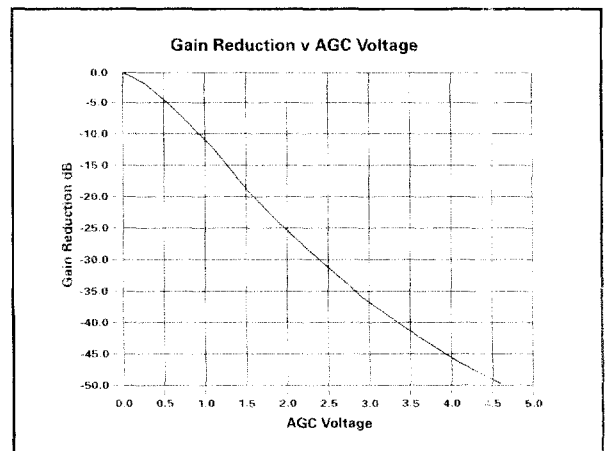
### Additional Specifications

Noise figure		4dB max
IF output at 1dB G.C.P.	LLD VGD	+10dB min +13dBm
Detector Dynamic Range		20dB min
Detector linearity		±1dB min
Video Output		5V min into 93 ohms
Gain Control	LLD VGD	50dB min 60dB min
Gain Control Voltage		0 to -5V
Gain trim VGD only		6dB min
Power	±12v or ±15V	+120mA max -90mA max
Weight	LLD VGD	85g max 105g max

### Video O/P Error VGD 16040



### Typical Gain Control LLD 3010



### Optional Features

- 0.5dB linearity
- 30dB detector dynamic range
- Switchable fast time constant (FTC) video
- Internal AGC voltage generation (EST models)
- Lower noise figure
- AC coupled video

### Ordering Information

LLD/VGD-XXXXX-XXX-XX

Video output	0 = No output 1 = AC coupled output
IF output	0 = No output 1 = IF output
Temperature	1 = 0 to +50 C 2 = -45 to +85 C 3 = -55 to +100 C 4 = Customer specified
Supply voltage	1 = ±12V 2 = ±15V
Connectors	A = SMA B = SMB C = SMC
Bandwidth MHz	
Centre frequency MHz	