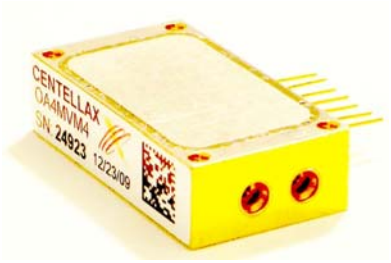
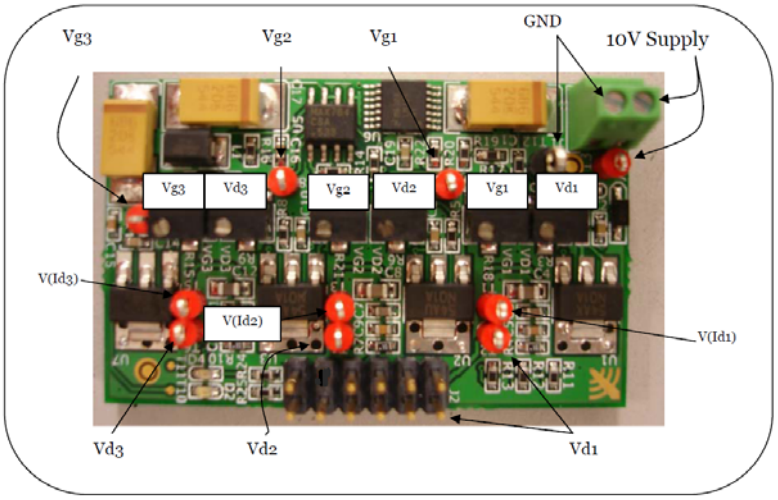
Biasing the OA4MVM4

Components: OA4MVM4, TE1B2, bias cable, suitable heatsink



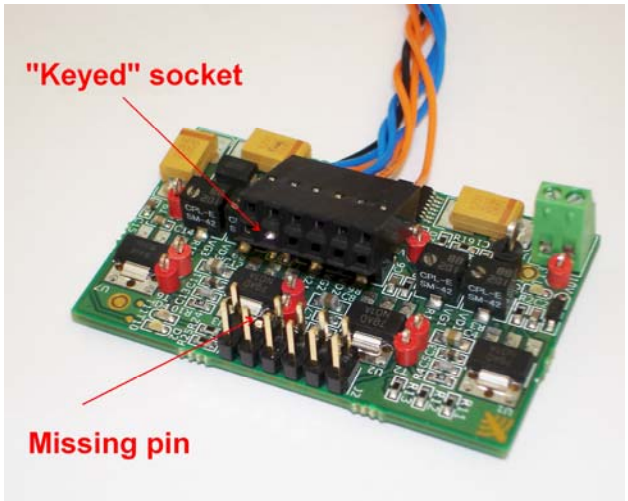


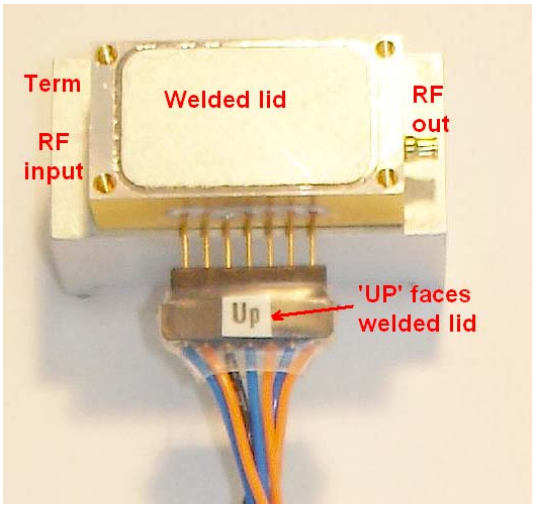
Set-up:

Connect the cable from bias board to modulator driver as shown. The connector to the bias board is 'keyed' to ensure correct orientation. On the module, the connector is labeled 'Up' on the side that faces the lid. Provide +10V and ground to the bias board, either with clip leads or using the terminal block.

CRITICAL – Be sure the cable orientations are correct at the bias board and module before power-up!

A suitable heatsink must be provided. Thermal paste or light pressure should be used to maintain contact between the module and the heatsink.

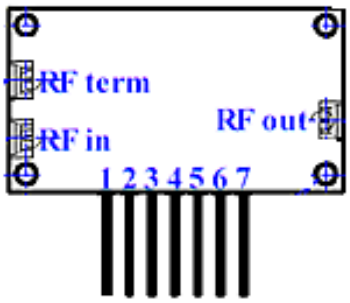




Operation:

Check complete set-up before power-up; DC bias cable, GPPO cables to inputs from MUX and from output to modulator, heatsink.

Bias board is preset to initial recommendations: All Vd1,2,3 = 7V, Vg1,2,3 = -0.1V. Adjust Vg2,3 to optimize cross-over and jitter as required. Adjust Vd3 for required eye amplitude.



OA4MVM4 Pin Definition

Pin	Function
RFterm	50 ohm termination
RFin	RF Input
RFout	RF Output
1 (Vg1)	1st stage gate bias
2 (Vd1)	1st stage drain bias
3 (Gnd)	Supply ground
4 (Vg2)	2nd stage gate bias
5 (Vd2)	2nd stage drain bias
6 (Vg3)	2nd stage drain bias
7 (Vd3)	3rd stage drain bias

Module pin assignments and bias board control trimpots are indicated below: