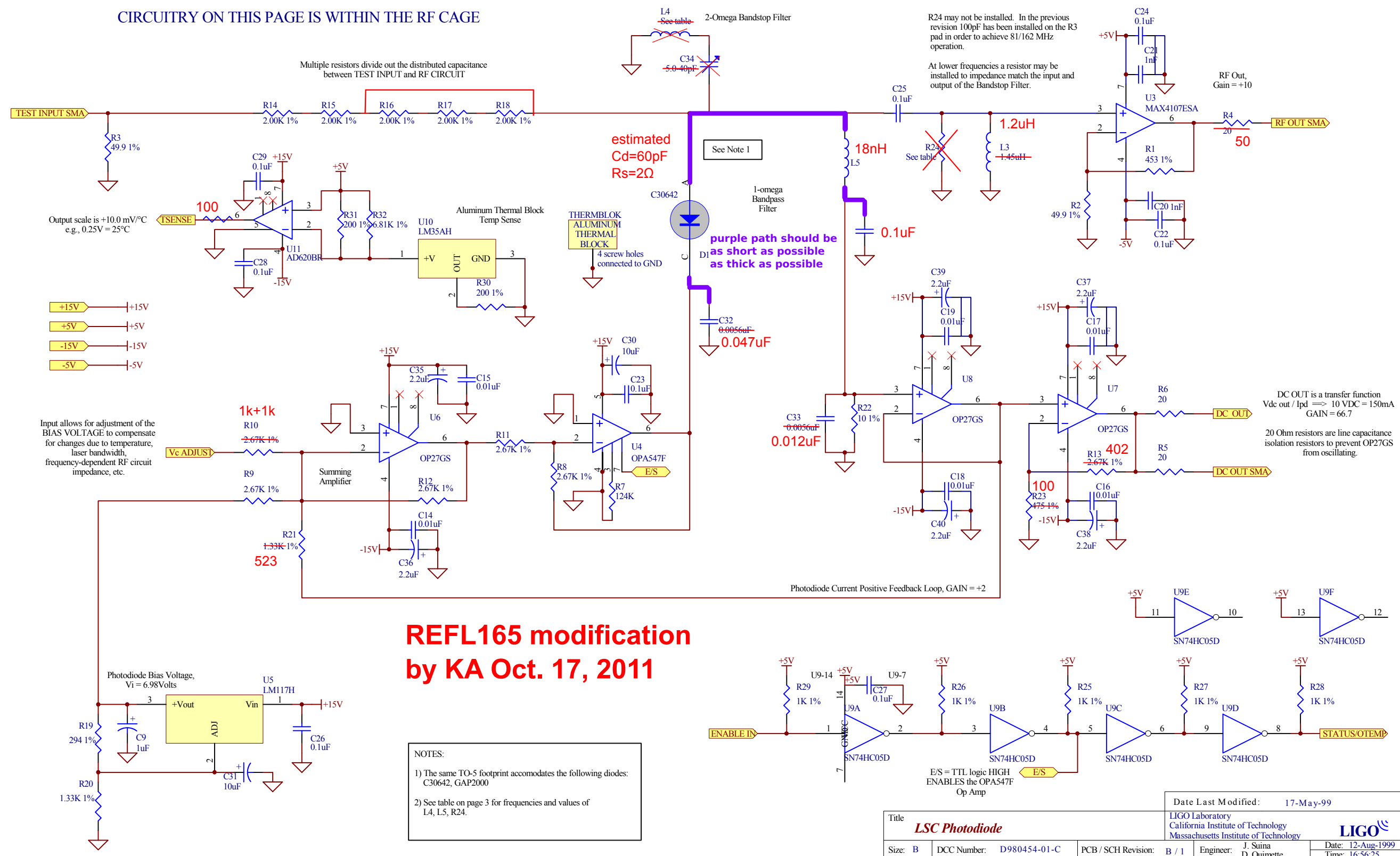


CIRCUITRY ON THIS PAGE IS WITHIN THE RF CAGE



Multiple resistors divide out the distributed capacitance between TEST INPUT and RF CIRCUIT

Output scale is +10.0 mV/°C
e.g., 0.25V = 25°C

- +15V → +15V
- +5V → +5V
- 15V → -15V
- 5V → -5V

Input allows for adjustment of the BIAS VOLTAGE to compensate for changes due to temperature, laser bandwidth, frequency-dependent RF circuit impedance, etc.

estimated Cd=60pF
Rs=2Ω

purple path should be as short as possible as thick as possible

R24 may not be installed. In the previous revision 100pF has been installed on the R3 pad in order to achieve 81/162 MHz operation.
At lower frequencies a resistor may be installed to impedance match the input and output of the Bandstop Filter.

DC OUT is a transfer function
Vdc out / Ipd ⇒ 10 VDC = 150mA
GAIN = 66.7
20 Ohm resistors are line capacitance isolation resistors to prevent OP27GS from oscillating.

REFL165 modification by KA Oct. 17, 2011

- NOTES:
- 1) The same TO-5 footprint accommodates the following diodes: C30642, GAP2000
 - 2) See table on page 3 for frequencies and values of L4, L5, R24.

Title LSC Photodiode		Date Last Modified: 17-May-99	
LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology			
Size: B	DCC Number: D980454-01-C	PCB / SCH Revision: B / 1	Engineer: J. Suina D. Ouimette
File: S:\SYSTEMS\LSCPHOTOD-1\FINAL\SCHEMA-1\8045401A.SCH		Date: 12-Aug-1999	Time: 16:56:25
			Sheet 2 of 2