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KMP1 BIAS INSERTION MODULE INSTRUCTIONS

- 1) The flexible microstrip line from the AV-LDD1-C unit is solder connected to PAD A and to the ground plane on the PC board on the output module (use minimum amounts of heat).
- 2) The pulse from the AV-LDD1-C is conducted to the laser diode via the resistor R_g (approx. 2 Ohms) and the diodes 80SQ045.
- 3) The DC bias (max 30 Amps) for the laser diode is applied to the anode of the 1N5834 diode (red lead). The DC bias is blocked from the AV-LDD1-C by the 80SQ045 diodes.
- 4) The anode of the laser diode under test is solder connected to PAD B while the cathode is to be connected to the heat sink chassis (which is the ground). One tapped 8-32 hole and one tapped 10-32 hole are provided on the heat sink chassis for laser diode mounting purposes.
- 5) CAUTION: The laser diode under test may dissipate as much as 60 watts when a DC bias of 30 amperes is applied. Consequently, a strong fan should be used to cool the KMP1 heat sink. In addition, the KMP1 heat sink should be bolted securely to a larger heat sink to aid in the cooling.
- 6) CAUTION: The AV-LDD1-C output should not be increased above zero when the laser diode load is not connected as this may result in the breakdown and possible failure of the 50SQ080 diode. This latter diode protects the laser diode from reverse potentials.

KMP1 BIAS INSERTION MODULE

SOLDER CONNECT TO
AV-DD1-C OUTPUT
LINE (PAD A AND GROUND PLANE)

$$R_s = \frac{22}{11} \Omega$$

