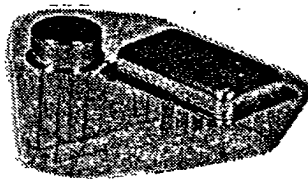




Specialists in Optical Communications

HIGH SPEED, LOW NOISE TRANSIMPEDANCE AMPLIFIERSMA, DV, and DK SERIES

<u>PART NUMBER</u>	<u>BANDWIDTH</u>	<u>RISE TIME (nsec)</u>	<u>TRANS-IMPEDANCE (mV/ A)</u>	<u>MAX. RMS NOISE AT OUTPUT OVER BW ( V)</u>	<u>MAX. NEI PER ROOT HERTZ (pA/ Hz)</u>	<u>PACKAGE</u>
MG7710	DC-100MHz	4	2	150	5.0	TO-5
MA8309	DC-200MHz	2	4	150	2.5	TO-5
<u>BUILT-TO-ORDER PARTS</u>						
MA7705	DC-10MHz	35	22	90	1.3	TO-5
MA7708	DC-30MHz	12	7	80	1.3	TO-5
MA7710	DC-100MHz	3.5	2	70	3.5	TO-5
MA8200-40	DC-250kHz	1300	500	150	1.6	TO-5
DV45	0.1-5MHz	70	400	2000	2.3	DIP
DK48	0.1-20MHz	20	100	1200	2.7	DIP

COMMON PARAMETERS

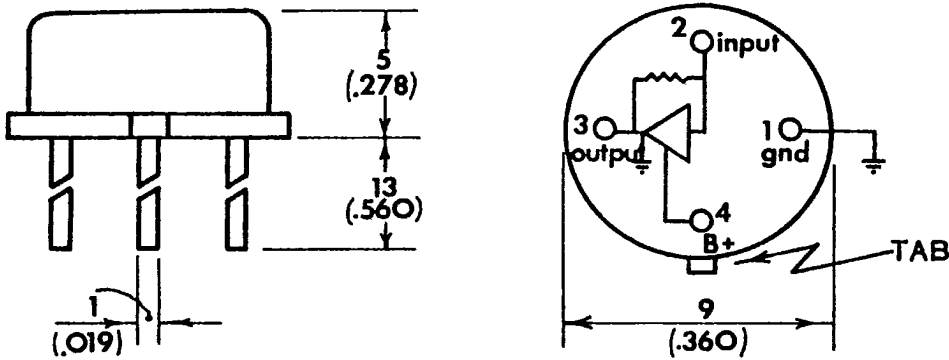
Operating Temperature:	-20 to +85 C
Power Supply:	+5 to +15V at 10 mA
Typical Amplifier Gain, A = 100	
Output Impedance:	50Ω AC 500Ω DC (50Ω for MA8309) MG7710
Typical Dynamic Input Impedance <200Ω	
Output Dynamic Range:	
Negative Input	86 dB
Positive Input	75 dB
DC offset voltages:	+1.4V except MA8309 and MG7710 at +3V

RECOMMENDATIONS FOR MA, MG, DV AND DK SERIES

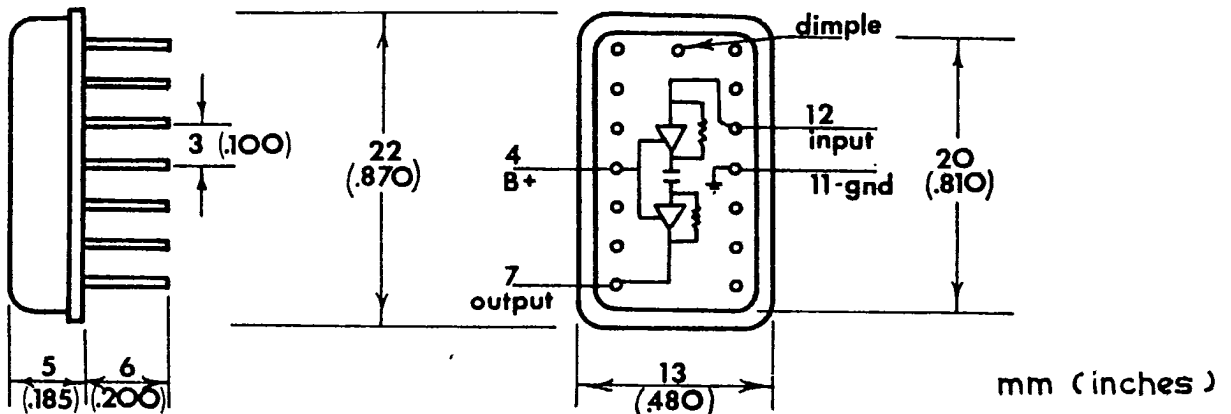
- (1) Standard power supply decoupling procedure should be used at the B+ pin using a series 100 ohm resistor and 0.01 μF or higher value capacitor.
- (2) These amplifiers will operate over a voltage range of +6V to +18V with +12V as the recommended operating point.
- (3) CAUTION: Since these modules are dc-coupled, the input and output points should be protected against accidental grounding or application of B+.
- (4) Differential input devices are available on custom basis with gain bandwidths higher than those listed here and with offset voltages at the output of less than 50 mV.

PIN CONFIGURATIONS (Top views)

MA, MG SERIES



DV, DK SERIES



mm (inches)