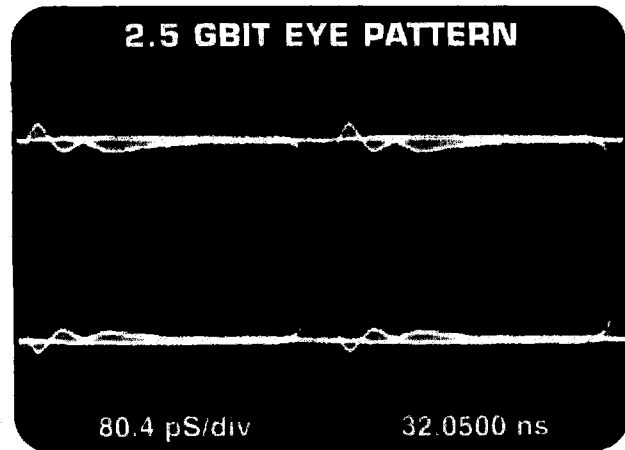
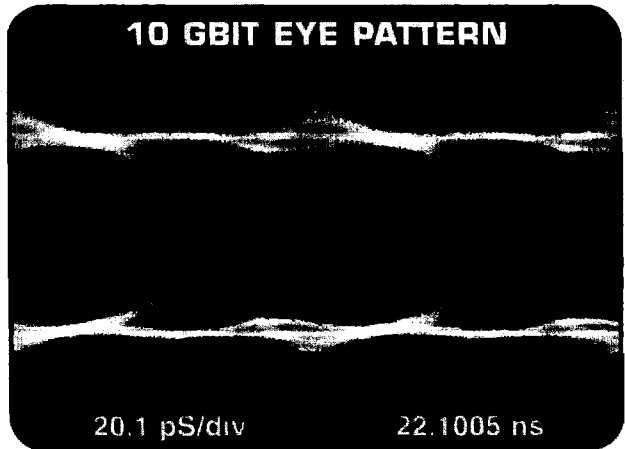
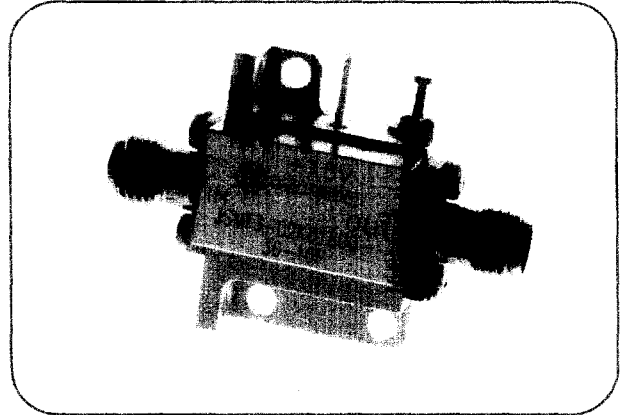


HIGH DATA RATE LOW-NOISE AMPLIFIERS

FEATURES

- **Optimized for 10 Gbit Fiber Optic Applications**
- **Designed to Meet the SONET and SDH Standards**

MITEQ's JSMF Series of broadband amplifiers utilizes hybrid MIC techniques and discrete GaAs FETs to support ultra-broadband applications, such as SONET and SDH-based fiber optic communication systems. These GaAs FET amplifiers include all bias and coupling networks for immediate installation into systems, and are aligned and measured in a 50 ohm environment. Standard designs support low-noise applications for use with photodiode detectors, however higher power designs for laser diode driver requirements are available upon request.

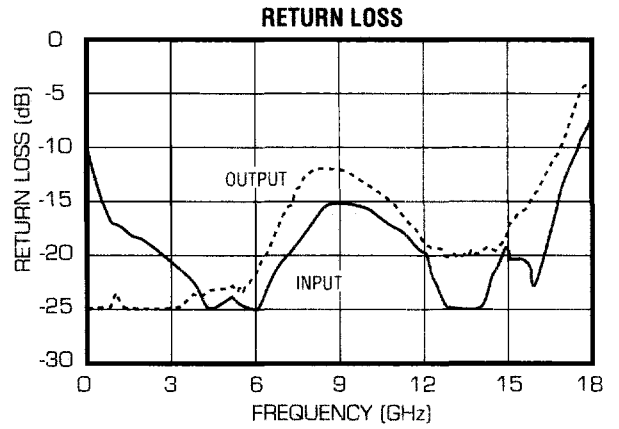
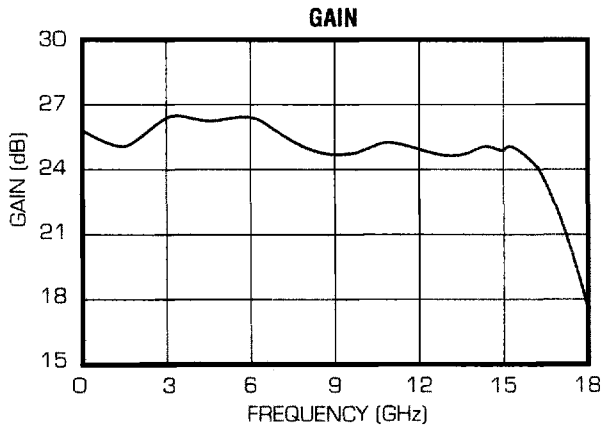


ELECTRICAL SPECIFICATIONS [50 Ω]

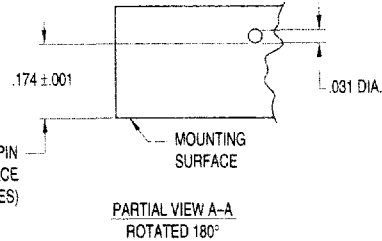
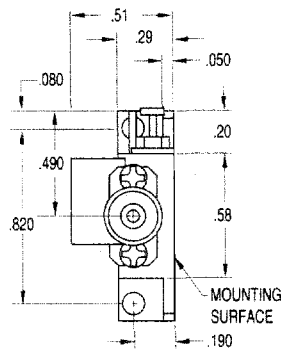
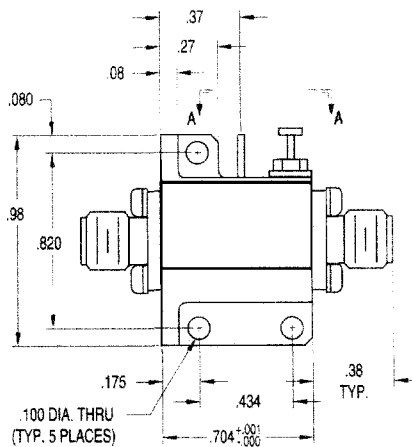
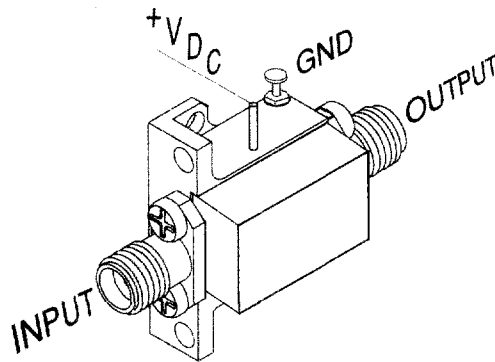
Bandwidth	2 kHz to 14 GHz
Power gain	25 dB minimum
Gain flatness	±1.5 dB maximum
Noise figure*	
JSMF3-02K150-30-10P	3 dB maximum
JSMF3-02K150-40-10P	4 dB maximum
JSMF3-02K150-50-10P	5 dB maximum
Group delay	±40 pS
Rise time	< 70 pS
Fall time	< 30 pS
Overshoot	
10 Gbit/s	< 10%
2.5 Gbit/s	< 10%
Output pwr. at 1 dB compr.	+10 dBm minimum
Input VSWR	2:1 maximum
Output VSWR	2:1 maximum

* Noise figure specified above 500 MHz.

HIGH DATA RATE LOW-NOISE AMPLIFIERS



OUTLINE DRAWING



NOTE:
DIMENSIONS ARE IN INCHES
TOLERANCES AS FOLLOWS:
XX = ±.01
XXX = ±.005

FROM BOTTOM OF PIN
TO MOUNTING SURFACE
(TYP. 2 PLACES)

PARTIAL VIEW A-A
ROTATED 180°