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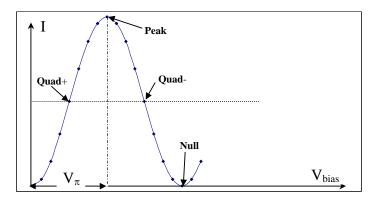
Http://www.YYLabs.com

#### **Introduction to Mini-MBC-3**

### A Tunable Modulator Bias Controller

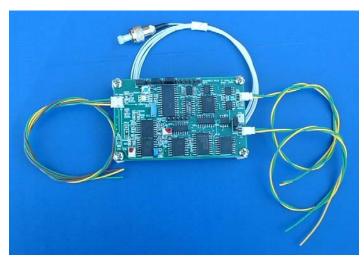
(Last updated on 10/23/08, Rev.1.1)

Mini-MBC-3 is a full-function miniature OEM version of the Modulator Bias Controller (MBC) family. It is designed especially suitable for systems used for analog applications. Mini-MBC-3 is designed to lock the working point of the modulator at positive slope quadrature (quad+), negative slope quadrature (quad-), null or peak points of its characteristic curve respectively. The tune-ability of the desired locked-working point is an important feature of mini-MBC-3, which will bring flexibility to many applications. Mini-MBC-3 also has remote tuning capability. The user can apply a voltage to the external tuning port to tune the working point. The other important feature is the working point is independent from the intensity of the optical signal. The locking mode and slope can be selected from the board by changing positions of jumpers. Please check our website for data sheet and spec (http://WWW.YYLABS.COM).



## Features of Mini-MBC-3

- User selectable locking slope (QUAD+  $\leftrightarrow$  QUAD-, NULL  $\leftrightarrow$  PEAK);
- User selectable locking mode (Quad+/Quad- ↔ Null/Peak);
- Tunable locked working position;
- Tuning Mode can be switched off/on;
- Remote tuning;
- Working point is independent from the light intensity
- Two operation modes: calibration mode and locking mode;
- Calibration off mode for quick system setup in locking mode;
- Low profile (3.1" \* 1.85" \* 0.65");
- Access for external photo-detector.



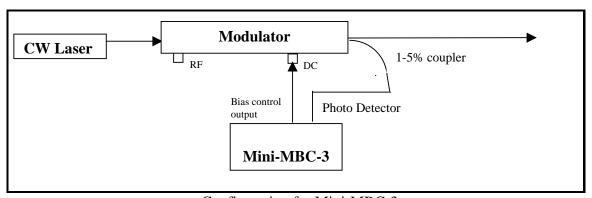
Mini-MBC-3

# **Tuning Mode**

The mini-MBC-3 can tune the desired locked working point away from the Peak/Null/Quad. This Tuning Mode can be switched off by open a jumper, so user can use normal operation mode to check the modulator performance. The tuning range is about +/-50 degree around each standard working point : Peak or Null, +Quad and -Quad.

## **Major Application**

**Typical Analog Applications** 



Configuration for Mini-MBC-3

For any question or information, please contact:

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