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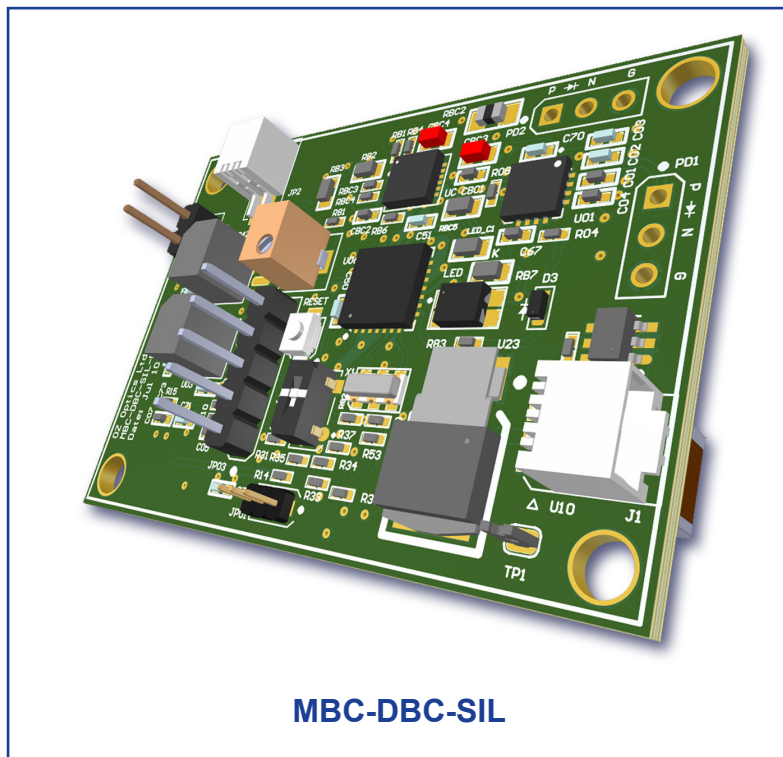
MODULATOR BIAS CONTROLLER – DBC-SIL

Features

- Designed to be used with either single LN MZ modulators or silicon based modulators
- Usable for Fabry-Perot fiber control loop-back
- Compact
- Ditherless, no. pilot tone
- High dynamic range, high accuracy
- Bias Port can deliver current up to 250 mA
(Note: Current limit is configurable per user request)
- Bias Port voltage adjustment capabilities from -10V to +10V
- Tunable
- Fast response
- Alarming LED for overtuning
- PCB board Size (1.37" x 1.95" x 0.65")

Product Description

The Ditherless Bias Controller is an OEM version standalone device for bias control in a feedback loop. It is designed to be used with either single LN MZ modulators or silicon based modulators. It locks the bias of the device to the desired reference point. It has many applications, such as for Modulator Bias Control or for Fabry-Perot filter control. Since it does not apply pilot tones, it does not disturb the system, which is very important for many analog systems. It features high accuracy and high dynamic range. The locking slope can be switched with a sliding switch on the board as long as the working function of the device is periodical. When the drift is out of the specified range, the unit will pull the bias back to the desired working point close to 0V. There are two photodiodes built into the board. An external reference voltage can also be applied if specified at the time of order.

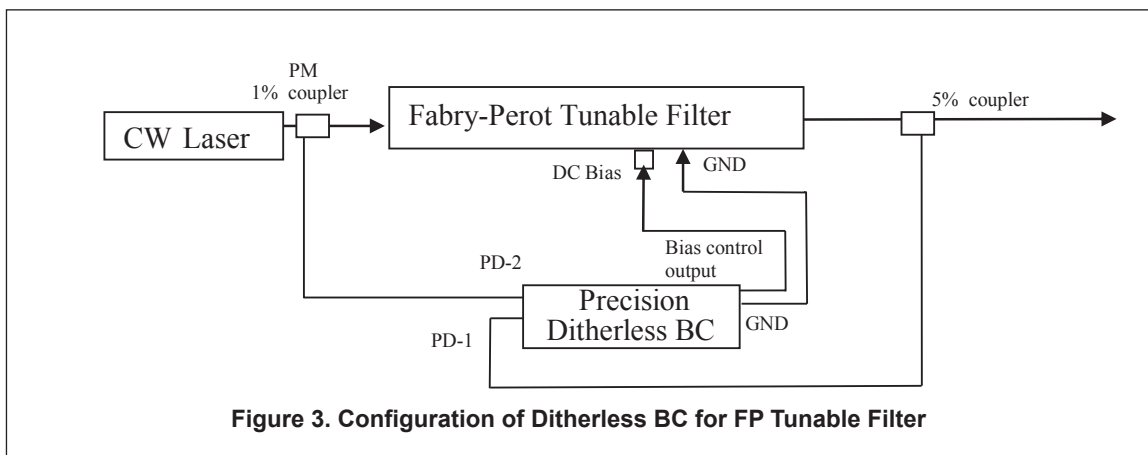
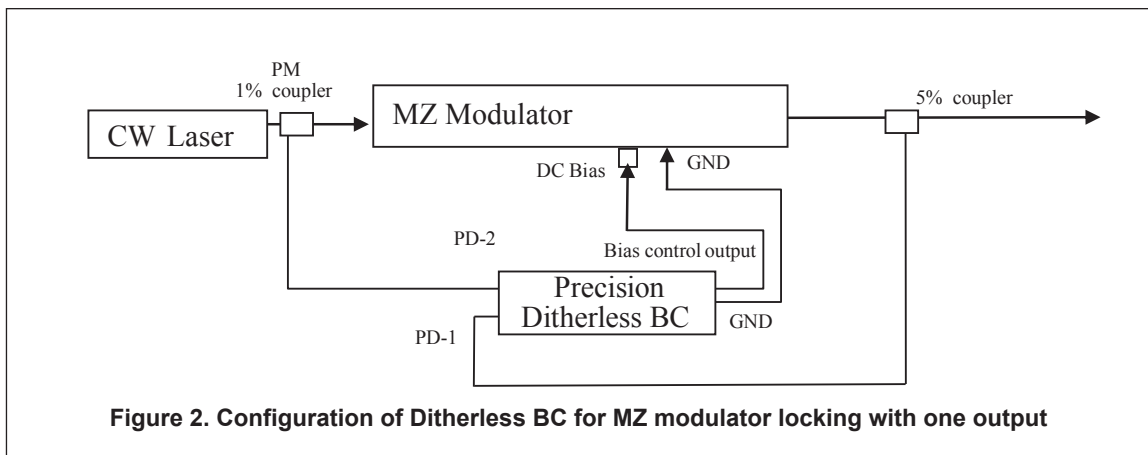
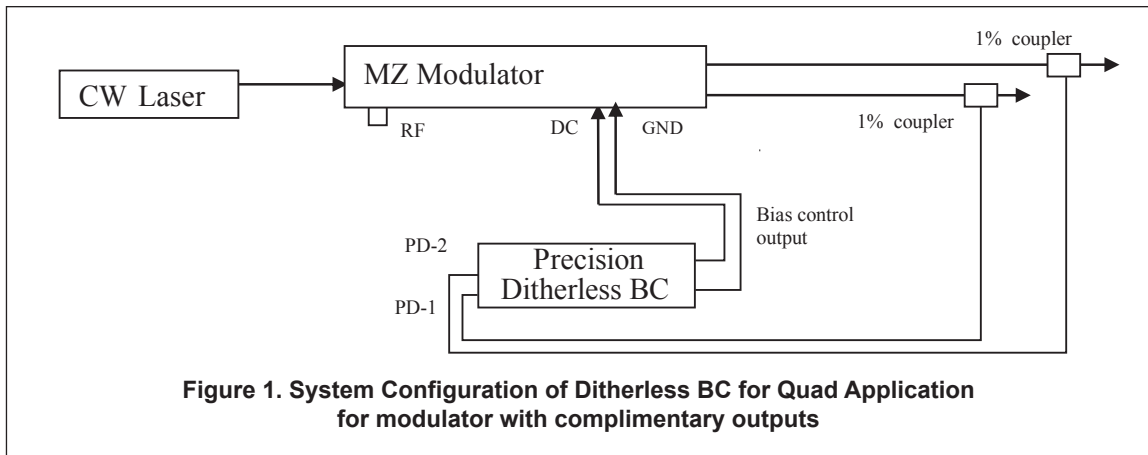


MBC-DBC-SIL

Specifications

Parameters	Min.	Typ.	Max.
Input Signal Current (mA)	0.1×10^{-5}		1
Input Optical Power (dBm)	-50		0
Locking Accuracy (%)		0.1	
DC Bias Voltage (V)	-10		+10
Bias Current (mA) ¹		Configurable	250
Positive Power Supply (V)	10	12	+15
Negative Power Supply (V)	-10	-12	-15
Positive Supply Current (mA)			35
Negative Supply Current (mA)			20
Operating Temperature (°C)	0–70		
Storage Temperature (°C)	-40–80		
Dimension L x W x H (inch)	1.37 x 1.95 x 0.65		

¹ Bias Current limit can be configured by manufacturer as per user request.



Part Number

MBC-DBC-SIL-X

X = Connector code:
 3U = FC/UPC
 3A = FC/APC
 SCU = SC/UPC
 SCA = SC/APC
 LCU = LC/UPC
 LCA = LC/APC