

SWITCHES

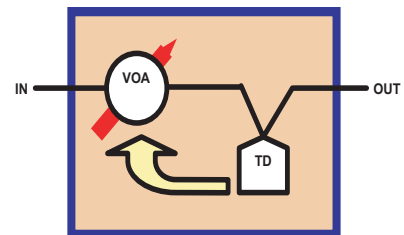
MULTI-CHANNEL MEMS DPE MODULE

DiCon's Dynamic Power Equalizer (DPE) maintains output optical power at a preset level for up to four fiber channels. The DPE continuously adjusts the attenuation through closed loop feedback from an output tap to our MEMS based attenuators.



FEATURES

- Small form factor (less than 6"x 4"x 1")
- Low insertion loss (< 1.8 dB)
- Precise resolution (< 0.1 dB)
- Excellent output accuracy (<+/- 0.3 dB)
- Wide attenuation range (> 30 dB)
- MEMS durability and reliability (>10⁹ Cycles)



APPLICATIONS

The MEMS DPE can be used in a broad range of optical power management applications, including channel balancing and matching, testing the dynamic range of optical systems, and limiting optical power at the inputs of sensitive test and measurement equipment.



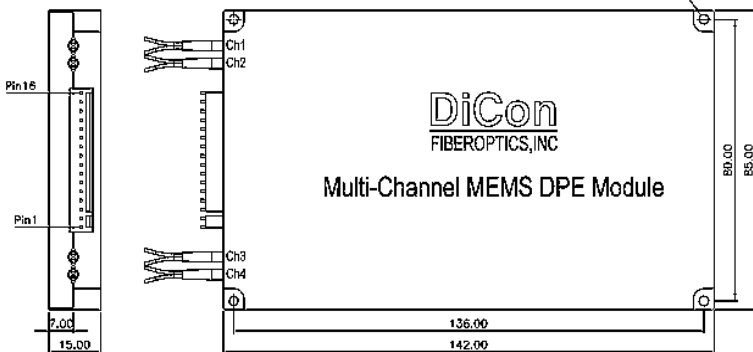
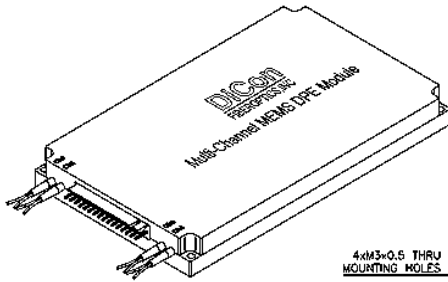
SWITCHES

SPECIFICATIONS

Insertion Loss ¹	2%	1.2 dB max.
	5%	1.6 dB max.
	10%	1.8 dB max.
Dynamic Power Range	2%	-27 to 17 dBm
	5%	-32 to 13 dBm
	10%	-35 to 10 dBm
Attenuation Range		30 dB min.
Output Accuracy		+/- 0.3 dB max.
PDL	0 - 10 dB	0.1 dB max.
	10 - 20 dB	0.2 dB max.
	20 - 30 dB	0.3 dB max.
WDL ²	0 - 10 dB	0.5 dB max.
	10 - 20 dB	0.7 dB max.
	20 - 30 dB	1.2 dB max.
Back Reflection		- 50 dB max.
Tuning Resolution		0.1 dB
Optical Power		23 dBm max.
Operating temperature		0°C to 70°C
Storage Temperature		-40°C to 85°C
Fiber Type		9 / 125 μm Singlemode

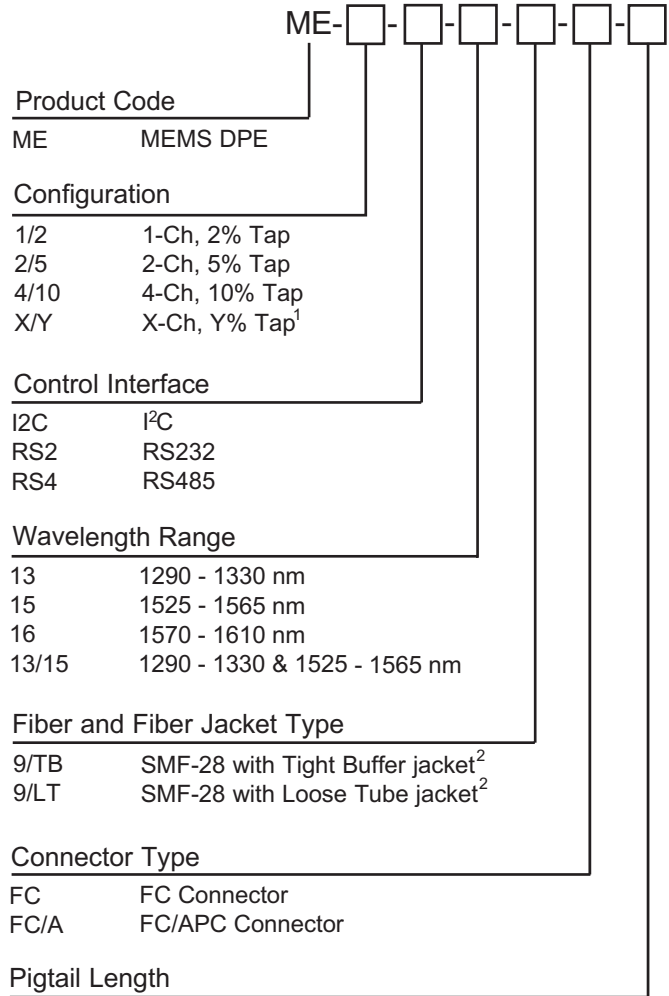
1. IL is measured at 1550nm, 23°C
 2. Over C-band, 1530 -1565 nm.

HOUSING DIMENSIONS



Units: mm

ORDERING INFORMATION



Product Code

ME MEMS DPE

Configuration

1/2 1-Ch, 2% Tap
 2/5 2-Ch, 5% Tap
 4/10 4-Ch, 10% Tap
 X/Y X-Ch, Y% Tap¹

Control Interface

I2C I²C
 RS2 RS232
 RS4 RS485

Wavelength Range

13 1290 - 1330 nm
 15 1525 - 1565 nm
 16 1570 - 1610 nm
 13/15 1290 - 1330 & 1525 - 1565 nm

Fiber and Fiber Jacket Type

9/TB SMF-28 with Tight Buffer jacket²
 9/LT SMF-28 with Loose Tube jacket²

Connector Type

FC FC Connector
 FC/A FC/APC Connector

Pigtail Length

1 1 meter long standard pigtail
 X Specified length

1. X ≤ 4, Y = 2, 5 or 10
 2. Or other equivalent 9μm Singlemode fiber

ELECTRICAL SPECIFICATIONS

Latching Type	Non-latching
Control Type	I ² C, RS232, or RS485
Connector Type	Molex 16-pin 2.54mm Pitch KK Solid Header
Supply Voltage	DC 5 V
Power Consumption	1 W max.