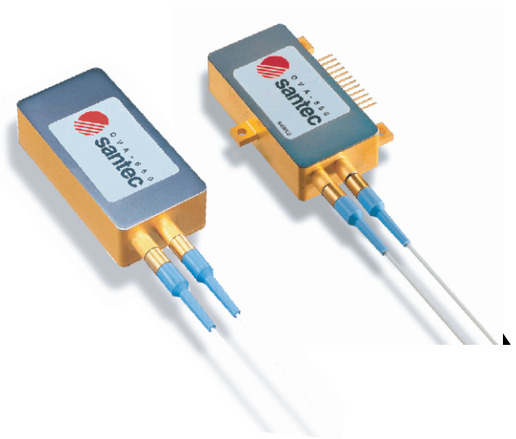
OPTICAL VARIABLE ATTENUATOR

OVA-650



The OVA-650 is a compact variable optical attenuator that uses a stepper motor for accurate electrical control. The unit has high resolution, low insertion loss, low PDL, and exhibits extremely low wavelength dependence. Two package designs are available with effective height of 12mm and 8mm (Dual-line pins on the bottom, Single-line pins on the side with screw tabs) respectively. This device can be easily mounted onto a printed circuit board for system integration.

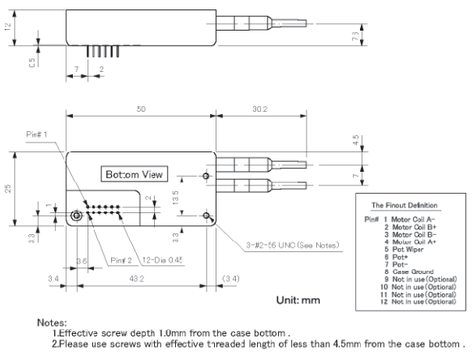
Features

- Low loss, low PDL, low wavelength dependence
- High reliability (Hermetically sealed)
- Latching operation
- Compact size suitable for system integration
- Optional tap power monitor available (Preliminary)
- Telcordia GR-1221 qualified

Applications

- Power equalization or gain-tilt control in optical amplifiers
- Transmitter power control
- Receiver power control
- Power control in OADM's.

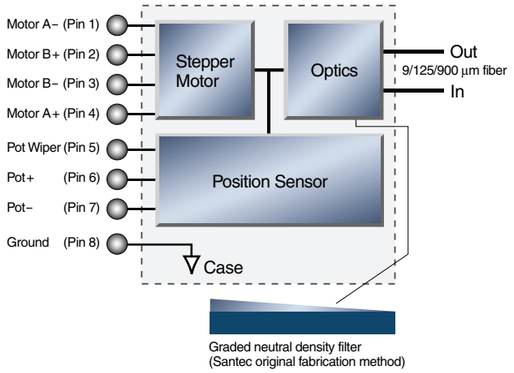
Dimensions

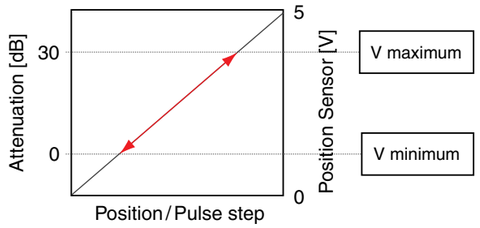


Notes:
1.Effective screw depth 1.0mm from the case bottom .
2.Please use screws with effective threaded length of less than 4.5mm from the case bottom .

Configuration

Interface pin-out





Optical Specifications

Parameter		Units		Note
Max Attenuation Range		dB	15 30	
Resolution	Max.	dB	0.1	
Insertion Loss	Max.	dB	0.6	Excluding connectors
Return Loss	Min.	dB	50	
Polarization Dependent Loss (PDL)	Max.	dB	0.2	
Wavelength Dependence of Attenuation	Max.	dB	0.2 (0-15 dB Atten.) 0.35 (<30 dB Atten.)	over 1525 ~ 1575 nm
Temperature Dependence of Attenuation	Max.	dB	0.15	Relative to 25 deg°C
Polarization Mode Dispersion (PMD)	Max.	psec	0.1	
Maximum Rated Optical Input Power		dBm	23	
Response Speed	Max.	ms	100	To change 3 dB Atten.
Repeatability of Attenuation Setting	Max.	dB	0.1	
Backlash	Max.	dB	0.2	
Operating Temperature		°C	0 to + 70	< 95% humidity

Electrical Specifications

Maximum Electrical Power Consumption	Max.	W	2.5
Maximum Electrical Power to Hold	Max.	mW	10
Position Sensor	Max.	k	12
Fiber			SMF, 0.9 Ø, 1m long. No connector or FC-SPC/APC
Size		mm	50 x 25 x 12
Weight	Max.	g	50

Ordering Code

A : Attenuation Range: **30** (30 dB attenuation standard) / **15**

B : Tap: none: **0** / input: **1** / Output: **2** / in & Out: **3**

C : Fiber Type: **09** (Standard 0.9mm tight buffer)

D : Fiber Length: **10** (Standard 1.0mm)

E : Connector Type: None: **0** / FC: **F** / SC: **S** / LC: **L**

F : Connector Polish: SPC: **S** / APC: **A**

G : Package Type:
Dual-line pins on the bottom: **1**
Single-line pins on the side with screw tabs: **2**

OVA-650 -A-B-C-D-E-F-G