SPECTRASWITCH®

WaveWalker™ 1x1 Optical Shutter with VOA

Release 1.0

Prospectus

The WaveWalker™ small, low-cost, high-durability shutter is based on the liquid crystal technology employed in SpectraSwitch's current 1x2 and 2x2 switches.

WaveWalker products provide the robustness of liquid crystal, and are designed to last through billions of cycles with stable optical performance and no moving parts to wear out – all in a compact, low-power package.

Reliability and repeatability, as well as long-term durability, are key to cost-effective implementations; the SpectraSwitch WaveWalker™ 1x1 Optical Shutter is specifically designed to provide breakthrough performance in these applications. The integrated attenuator provides the capability for gain trimming.

Various packaging options are available. For many applications, the electronics may be optionally integrated into the OEM system control so the WaveWalker's dimensions are further reduced.

Designed to exceed Telcordia's GR-1221-CORE recommendation (testing is currently in process), WaveWalker products are targeted for applications in carrier grade systems. The smart optical platform allows adaptation to multiple system specifications, while a product roadmap featuring increasing scale and integration ensures that the component evolves with the application.

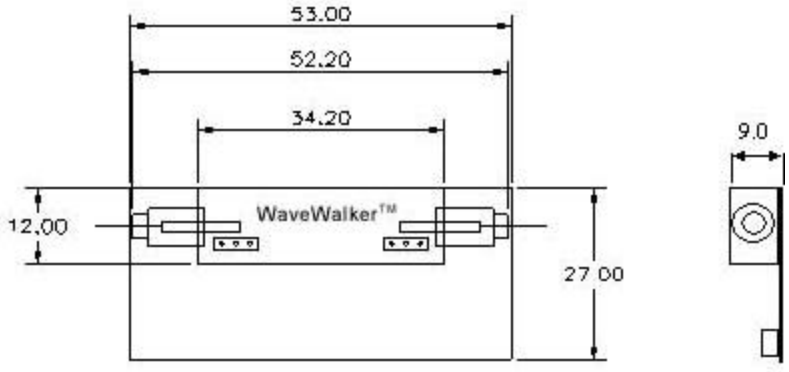
TARGET SPECIFICATIONS

Insertion loss (typical)	< 0.8 dB
Insertion loss (maximum)[1]	< 1.0 dB
IL stability (0°C to 70°C)	+/-0.1 dB
Off-State Isolation	< -35 dB
Polarization dependent loss	< 0.2 dB
PDL (typical)	< 0.08 dB
Return loss	> 45 dB
Switching time (*On* to *Off)*	< 2 msec
Durability	>> 1B cycles
Operating temperature	0° to 70°C
Wavelength range[2]	C-Band
Fiber type	SM
Attenuation Range	0-30 dB
AR (coarse)	10-30 dB
AR (fine)	0-10 dB
Attenuation Resolution	0.2 dB
Flatness[3]	< 0.3 dB
Input optical power	> 200 mW
Control interface	TTL level
Power supply	+/- 12 Vdc
Dimensions	(53x27x9)mm

[1] $IL = IL_o + \Delta IL_T + \Delta IL_{PDL} + \Delta IL_\lambda$
[2] L-Band Available
[3] Over 0-20dB attenuation range

Optional power supply +/-15 Vdc
Connectorization available
Designed to exceed GR-1221-CORE

DIMENSIONS



APPLICATIONS

- Test & Measurement
- Network Configuration