



8-fiber V-groove Assembly

## CARDConnect™ V-groove Assemblies

AFL's CARDConnect V-groove assemblies provide on-card integration into next generation photonics devices. The V-groove assemblies are sold separately from module housing to allow customizable options to meet application requirements including fiber/cable type, channel count, polish angle, and length of assembly.

AFL incorporates a flat lid in the design to facilitate the accurate alignment of the fibers into the V-grooves by creating a three-point contact area thus providing excellent fiber core position accuracy. Custom fiber assembly lengths and a variety of opposite end connector types facilitate AFL's unique ability to meet application requirements. The CARDConnect V-groove assemblies are engineered to provide high coupling efficiency and low insertion losses.

### Features

- Custom polish angles
- One to 16 V-groove channels
- AR Coating optional
- Single-mode and multimode fiber type
- Core Pitch Tolerance  $\pm 0.7 \mu\text{m}$  for 8 channels or less (for standard SMF)
- Core pitch tolerance  $\pm 1 \mu\text{m}$  for greater than 8 channels (for standard SMF)

### Applications

- Interface into pluggable optical modules and active optical cables
- Connection into planar waveguide devices
- Integration into MEMS devices

### Ordering Information

V-groove assemblies can be completely customized for almost any on-card application. The base of the assemblies starts with the v-groove that can be defined by the parameters below with any length of fiber coming from the back of the v-groove block. The fiber can then be connectorized per your application needs with single or multi-fiber terminations. AFL's CARDConnect solutions are completely customizable to meet your needs. Contact AFL customer service at 1-800-235-3423 to discuss your opportunities

	DIMENSION
A	V-groove Width
B	Lid Height
C	Substrate Height
D	Combined $0.03 \text{ mm} + B + C$
E	Fiber Pitch
F	Substrate Length
G	Polish Angle
H	Lid Length

