High-speed data rates with TO PLUS® headers from SCHOTT

Product Information

TO PLUS® is a TO header with enhanced performance for high speed data rates of 10Gbit/s and above. In a recent breakthrough, the same line of headers has been optimized and proven to work at data rates of 17Gbit/s. This breakthrough has resulted in enhanced bandwidth of TO headers, enabling end users to keep costs in check by utilizing the existing infrastructure of assembly and manufacturing. With the use of the TO PLUS® transceiver, manufacturers need not resort to complex flat packs or ceramic packages.

Advantages

- **Hermetically sealed using proven glass-to-metal sealing technology:** TO headers have been used in the market for several decades due to their proven reliability and performance. The TO PLUS® header line utilizes the same technology to deliver the same kind of reliability.

- **Excellent RF Performance:** With matched impedance, the headers are able to achieve low insertion and return losses for high data rates of 10Gbit/s and above.

- **Existing Outlines:** Since the enhancement is achieved by a combination of glass, pins and placement only, a TO PLUS® can be built from any existing outline of TO headers, such as TO46, TO56, TO38, etc. This allows end users to utilize the same mating optical caps and manufacturing techniques / infrastructure.

- **One-stop-shopping** due to vertically integrated manufacturing, from materials to components.

### Preliminary Specifications

<table>
<thead>
<tr>
<th>Platform</th>
<th>TO PLUS®</th>
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</thead>
<tbody>
<tr>
<td>Outlines:</td>
<td>TO46, TO56, TO38, Custom TO</td>
</tr>
<tr>
<td>Impedance:</td>
<td>25 Ω / 50 Ω / 100 Ω</td>
</tr>
<tr>
<td>Return Loss S11 @ 10Ghz</td>
<td>Better than -20dB</td>
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<tr>
<td>Insertion Loss S21 @ 10Ghz</td>
<td>Better than -1dB</td>
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</tbody>
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### Applications

- 10G Headers for VCSEL’s in Fiber Channel 4G / 8G
- For LAN / Gigabit Ethernet Applications
- 17G Fibre Channel

For more information:

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