SINGLE PORT RJ45

AR11-4051I

- 10/100/1000 Gigabit Base-T
- Transmit open circuit inductance (OCL): 350uH (MIN)
  @ 100KHz, 0.1Vrms with 8mA DC Bias
- RJ45 jack cavity conforms to FCC rules and regulations Part 68, SUB Part F
- Industrial Temp: -40°C to +85°C

**Electrical Specifications @ 25°C**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>OCL (µH Min) @ 100kHz, 0.1V</th>
<th>Turns Ratio (± 2%)</th>
<th>Cross Talk (dB Min)</th>
<th>HI-POT 1.0mA (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With 8mA DC Bias</td>
<td>chip: cable</td>
<td>0.5-10MHz 30MHz 50MHz 100MHz</td>
<td>without capacitance with capacitance</td>
</tr>
<tr>
<td>AR11-4051I</td>
<td>350</td>
<td>1CT:1CT</td>
<td>-50 -40 -35 -30</td>
<td>1500 AC 2250 DC</td>
</tr>
</tbody>
</table>

**Electrical Specifications @ 25°C**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Insertion Loss (dB Max) @ 1-100MHz</th>
<th>Return Loss (dB Min) @ 100 Ohm</th>
<th>CMR (dB Min)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-100MHz 100-125 MHz (10/100/100)</td>
<td>1-30MHz 30-50MHz 60MHz 60-80MHz</td>
<td>1-100MHz</td>
</tr>
<tr>
<td>AR11-4051I</td>
<td>-1.0 -1.2 -18 -16 -14 -12 -10 -30</td>
<td></td>
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</tbody>
</table>

All specifications subject to change without notice.

**MECHANICAL**
1. Shield- 0.20mm THICKNESS BRASS C2680 H.
   PLATING NICKEL 20u" Min.

2. Housing- Standard Material Nylon PA66 Glass filled
   Polyester UL94V-0 Standard Color Black.

3. Insert Pin- Plastic Nylon66 GF UL94V-0, Standard
   Color Black.
   Pin: 0.35mm Thickness Phos-Bronze C5210 EH.
   Plating: Nickel 40u"-60u" for all and Plating Sn 100u"-120u"
   6u" Gold Plating.

4. Contact Pin: Plastic Nylon PA66, Glass Filled, UL94V-0,
   Standard Color Black.
   Pin: 0.35mm Thickness SUS430.
   Plating: Nickel 40u"-60u" for all and Plating Sn 100%

Suggested PCB Layout
All dim. tolerance are ±0.05mm.