Dual Port RJ45 Connector  AR12-4287I

- 10/100 BaseT for LAN and other Ethernet Applications
- For PoE Applications. Compliant with IEEE302.3af
- Impedance: 100OHMS
- RJ45 jack cavity conforms to FCC rules and regulations Part 68, SUB Part F
- Industrial Temp: -40ºC to +85ºC
- Contact factory for Standard Operating Temp.
- Optional Gold Plating Thickness
- Other LED Patterns available
- With Green and Yellow LED’s

**Electrical Specifications @ 25°C**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>OCL(uH Min) @ 100kHz, 0.1V With 8mA DC Bias</th>
<th>Turns Ratio chip: cable (±3%)</th>
<th>Insertion Loss (dB Max)</th>
<th>Return Loss (dB Min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR12-4287I</td>
<td>350</td>
<td>1:1</td>
<td>-1.0</td>
<td>-18</td>
</tr>
</tbody>
</table>

**Cross Talk (dB Min) 1-30MHz 30-60MHz 60-100MHz**

<table>
<thead>
<tr>
<th>1-30MHz</th>
<th>30-60MHz</th>
<th>60-100MHz</th>
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<tbody>
<tr>
<td>-40</td>
<td>-35</td>
<td>-30</td>
</tr>
</tbody>
</table>

**CMR (dB Min) 1-100MHz 50-100MHz**

<table>
<thead>
<tr>
<th>1-100MHz</th>
<th>50-100MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>-30</td>
<td>-20</td>
</tr>
</tbody>
</table>

**Balanced DC Line Current (Max) 350mA @ 48VDC**

<table>
<thead>
<tr>
<th>HI-POT (Vrms)</th>
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<tbody>
<tr>
<td>1500</td>
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</table>

All specifications subject to change without notice.

**MECHANICAL**

- Front Side View
- Left Side View
- Top Side View
**SCHEMATICS**

VC+ P5  
TD+ P1  
TCT P4  
TD− P2  
RD+ P3  
RCT P7  
RD− P6  
VC− P8  

VC+ P10  

VC− P9  

PCB LAYOUT

NOTES

1. Meets IEEE 802.3AF specification
2. Connector Materials:
   - Housing: Thermoplastic UL94V-0
   - Contact/Shield: Copper alloy
   - Shield plating: Nickel
   - Contact plating: Gold 6 micro-inches min. in contact area.
3. Wave solder tip temperature: 265°C Max, 5 Sec Max