2X1 DUAL PORT RJ45 CONNECTOR AR21-3952I

- 10/100 Base-T Ethernet Application
- Impedance: 100OHMS
- 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
- Standard operating temp: -40°C to +85°C
- Storage temperature range: -40°C to +85°C

### Electrical Specifications @ 25°C

<table>
<thead>
<tr>
<th>Part Number</th>
<th>OCL (uH Min @ 100kHz, 0.1V)</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>AR21-3952I</td>
<td>350</td>
<td>1CT:1CT</td>
<td>1.0</td>
<td>-20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>0.3-100MHz</th>
<th>1-30MHz</th>
<th>30-60MHz</th>
<th>60-80MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR21-3952I</td>
<td>1.0</td>
<td>-20</td>
<td>-15</td>
<td>-10</td>
</tr>
</tbody>
</table>

### Electrical Specifications @ 25°C

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Cross Talk (dB Min)</th>
<th>CMR (dB Min)</th>
<th>HI-POT (Vrms Min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR21-3952I</td>
<td>-30</td>
<td>-30</td>
<td>1500</td>
</tr>
</tbody>
</table>

All specifications subject to change without notice.

### MECHANICAL
2X1 Dual Port RJ45 Connector
AR21-3952I

SCHEMATICs

PCB LAYOUT

NOTES

1. Designed to support application, such as SOHO (ADSL modems), LAN-on-Motherboard (LOM), hub and Switches.
2. Meets IEEE 802.3 specification
3. Connector Materials:
   - Housing: Thermoplastic UL94V-0
   - Contact/Shield: Copper alloy
   - Shield plating: Nickel
   - Contact plating: Gold 6 micro-inches min. In contact area.
4. Wave solder tip temperature: 265°C Max
   Wave solder tip temperature time: 5 Sec Max