HP 5334B C-Channel retro fit.

Shopping list:

<table>
<thead>
<tr>
<th>Component</th>
<th>Part Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescaler</td>
<td>OEM MB506</td>
<td>Superior replacement μPB1505GR (&lt; 2.4GHz)</td>
</tr>
<tr>
<td>Diode Quad Rings</td>
<td>OEM 1900-0083</td>
<td>Superior replacement HSMS-2817 (&lt; 3GHz)</td>
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<td></td>
<td>(5082-2831) replaced with: 5082-2303</td>
<td></td>
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<tr>
<td>RF Connector Adapter</td>
<td>SO8 to DIL-8</td>
<td></td>
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</tbody>
</table>

Procedure

Remove the PCB from the chassis to enable decent access.
Drill front panel to suit chosen connector.
Choose which input you'll use and remove the DC blocking cap from the other (C327 or C328)
Add selected diodes
Assemble Prescaler to DIL adapter
Attach appropriate coax interconnect to PCB
Reassemble and test.

Notes

I couldn't find any appropriate diode rings, so for each diode ring, I substituted two series pair connected devices instead. I used HSMS-2812 which is far superior to the original part.
While the Peak Detector diodes (CR302) do need to be in a ring, the Limiter (CR303) does not. It is simply two forward and two reversed to ground to clamp the input level.

While not being a perfect fit, it's still pretty neat.
The μPB1505GR is pin compatible with the MB506, so only a package adapter is required.

73 m0xen