bridge. This normal force, however, increases the likelihood of damage to the E/O engine, the interior circuit board, or both.

[0005] Accordingly, there is a need for a pluggable connector that can provide desirable heat transfer while minimizing a likelihood of damage to internal electronics, such as an E/O engine and/or interior circuit board.

[0006] Embodiments of the present invention seek to solve this problem by providing a pluggable connector according to claim 1.

[0007] According to an aspect of the invention, a pluggable connector comprises a connector housing having a leading end that is configured to mate with a receptacle assembly. The connector housing has an interior cavity. A communication assembly held by the connector housing includes internal electronics located within the interior cavity. A mating terminal is located proximate to the leading end and is communicatively coupled to the internal electronics. A thermal-transfer assembly is disposed within the interior cavity. The thermal-transfer assembly includes first and second thermal-transfer modules that each include a plurality of spaced-apart projections. The projections of the first and second thermal-transfer modules are interleaved with one another. The first thermal-transfer module is coupled to the internal electronics and the second thermal-transfer module is coupled to the connector housing such that the first and second thermal-transfer modules form a thermal-transfer path between the internal electronics and the connector housing.

[0008] The invention will now be described by way of example with reference to the accompanying drawings wherein:

[0009] Figure 1 is a perspective view of a plug and receptacle assembly formed in accordance with an embodiment.

[0010] Figure 2 is a cut-away view of a pluggable connector formed in accordance with one embodiment that may be used with the plug and receptacle assembly of Figure 1.

[0011] Figure 3 illustrates an enlarged cross-sectional view of the pluggable connector of Figure 2 in which a pair of housing shells of the pluggable connector are separated.

[0012] Figure 4 illustrates an enlarged cross-sectional view of a first thermal-transfer module formed in accordance with an embodiment that may be used with the pluggable connector of Figure 2.