File E28476

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#### DESCRIPTION

# PRODUCT COVERED:

USR, CNR - Component Connectors, Series MINIPAK HDL Connector

### **GENERAL:**

These devices are multi-pole connectors intended for factory assembly printed wiring boards where the acceptability of combinations is determined by Underwriters Laboratories Inc. The devices are identified as follows:

USR indicates investigation to United States Standards, UL 1977, Second Edition.

CNR indicates investigation to Canadian National Standards, C22.2 No. 182.3.

### RATINGS:

Series	Max Power Contacts	Max Ratings	Coverage		
MINIPAK HDL	10	25A, 48 VDC	USR, Not for current interrupt		
MINIPAK HDL	10	20A, 15 VDC	USR, For current interrupt		
MINIPAK HDL	24	9 A, 48 VDC	USR, CNR - Not for current interrupt		
MINIPAK HDL	24	13.4 A, 15 VDC	USR - For current interrupt		
MINIPAK HDL	2	17 A, 48 VDC	USR, CNR - Not for current interrupt		

Signal contacts: 30 V

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# TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in or with complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Conditions of Acceptability - The following are among the considerations to be made when evaluating the device in the end-use product.

# Interruption of Current

1. These devices, except for those identified in the Ratings Table, are not suitable for interrupting the flow of current by connecting or disconnecting the mating connector.

# Current-Carrying Capability and Current Ratings

2. These devices have been subjected to the Temperature test with the rated currents and maximum temperature rise values tabulated below. The temperature test was performed with the power contact configuration detailed below. The signal contacts were not energized during the performance of the Temperature Test.

Series	Max Current, A	Maximum Temperature Rise, °C			
MINIPAK HDL Connector - 10 power contacts (Not for Current Interrupt)	25	86.4			
MINIPAK HDL Connector - 10 power contacts (For Current Interrupt) - Signal contacts not energized.	20	51.2			
MINIPAK HDL Connector, max 24 position power plugs and receptacles (Not for Current Interrupt)	9	26.9			
MINIPAK HDL Connector, max 24 position power plugs and receptacles (For Current Interrupt)	13.4	54.3			
MINIPAK HDL Connector, max 2 position power plugs and receptacles (Not for Current Interrupt)	17	24.7			

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### Insulating Materials

3. These devices employ insulating materials with properties as tabulated below at the minimum thickness employed in the connector housing, the suitability of the insulating materials based on the documented values shall be determined in the end-use application. Please note the values specified in the table when multiple materials are indicated represent the minimum values for the group of materials.

Cat. No.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	RTI Str	Max Operating Temp, <sup>0</sup> C
* MINIPAK HDL Connector Series, Plugs	A	0.7 mm	VO	·-	<del>-</del>	240	130	130
MINIPAK HDL Connector Series, Receptacl es	A	0.4 mm	<b>V</b> 0		"	240 ~	130	130

- (#) Code for Insulating Body Material.
- R/M No. 704105-3 (color: Black).
  - 1. Dielectric strength (kV/mm): 21
  - 2. CTI: 3

### Miscellaneous

The enclosure of the device has live parts that may be exposed to user contact when the connector is energized. The device is suitable for use only within an acceptable enclosure.