

NEC

Safety Standard Certificate for Photocoupler

PS286x-1/4



● UL Certificate

Standard
File No.

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DESCRIPTION

PRODUCT COVERED:

Optical Isolator, Types PS2861-1 and PS2865-1, PS2861H-1, and PS2865H-1.

RATINGS:

Model No.	Current, mA		Power, mW		Isolation Voltage (AC)	Max. Operating Temp., °C
	Diode	Detector	Diode	Detector		
PS2861-1	50	40	60	120	2500	100
PS2865-1	± 50	40	60	120	2500	100

Model No.	Current, mA		Power, mW		Isolation Voltage (AC)	Max. Operating Temp., °C
	Diode	Detector	Diode	Detector		
PS2861H-1	50	40	60	120	3000	100
PS2865H-1	50	40	60	120	3000	100

The junction temperature of the models described in this section is 125°C.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

These devices are optically coupled isolating switches with gallium arsenide light emitting diodes optically coupled to photo detectors. The solid state portion of these devices is encapsulated in a silicon or epoxy compound. The light emitting diode and detector are separated by an insulating window. Internal "chips" are provided with terminals molded into the enclosure.

Use - For use only in products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Conditions of Acceptability - Each device shall be reviewed with respect to the following conditions of acceptability:

1. The short circuit interrupting capacity, or behavior under short circuit conditions, has not been evaluated for these devices. Accordingly, the end-use circuit should contain suitable impedance to eliminate the need for such testing, or appropriate tests should be conducted.
2. The device shall be installed in compliance with the enclosure, mounting, spacings, and segregation requirements of the ultimate application. No spacings are specified for the device.
3. The outer surface temperature ratings recorded above shall be acceptable in the ultimate application.
4. The suitability of use when exposed to oil, chemicals and the like has not been determined by this investigation.
5. The suitability of the connections shall be determined in the end-use application.
6. The capacity of the device to control a load has not been investigated.
7. The suitability of the device to be mounted over dead metal or metal of opposite polarity has not been investigated.
8. These devices are intended for factory wiring only.

CONSTRUCTION DETAILS:

General - The general design, shape and arrangement shall be illustrated in the following descriptive pages and illustrations. All dimensions are approximate.

Marking - Recognized company name or trademark, and type designation, of 61 or 65 provided on each unit.

Specification Sheet - Specification sheets shall be available at the manufacturing facility and shall contain the following information in tabular or graphic format:

1. Maximum continuous power, a current and a voltage rating for both the photo-emitter and the photo-sensor.
2. A dielectric insulation voltage rating between input and output terminals. This should be the same as the isolation VAC.
3. The maximum operating temperature.
4. Derating specification related to ambient temperatures.

Model Differences - All models have identical insulation systems. The only difference is in the output circuit configuration.

Abbreviation - R/C - Recognized Component.

Pin Connections - See ILL. 1 for details.

Model Dimensions - See ILL. 1 for details.