

NEC

Safety Standard Certificate for Photocoupler

PS2581L1/L2, PS2581AL1/AL2



● **UL Certificate**

Standard
File No.

UL1577
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D E S C R I P T I O NPRODUCT COVERED:

* Double Protection - Optical Isolators, Type 2581, 2581A may have prefix PS, followed by L1 or L2.

RATINGS:

Model No.	Current, mA		Power, mW		Isolation Voltage (ac)	Maximum Operating Temp °C
	Diode	Detector	Diode	Detector		
PS2581L1	80	50	150	150	5000	100
PS2581L2	80	50	150	150	5000	100
*PS2581AL1	30	30	150	150	5000	100
*PS2581AL2	30	30	150	150	5000	100

The maximum 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 electrical and outer surface temperature ratings recorded below 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. If a particular end-use application requires evaluation of "as received" case material properties not contemplated under the scope of this investigation, such properties will have to be separately investigated.
6. The suitability of the connections shall be determined in the end-use application.
7. the capability of the device to control a load has not been nvestigated.

8. The suitability of the device to be mounted over dead metal or metal of opposite polarity has not been investigated.
9. The device is intended for factory installation in compliance with the enclosure, mounting, spacing, and segregation requirements of the ultimate application.
- 10.* The optical isolator enclosure is considered acceptable for only one level of protection. The double protection requirements for the end-use product are to be given further consideration with regards to the optical isolator enclosure.