

New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (201) 376-2922
(212) 227-6005
FAX: (201) 376-8960

Optically-Coupled Isolator

Optoelectronic Products

4N25, 4N26 4N27, 4N28

General Description

The 4N25, 4N26, 4N27, and 4N28 series of opto-isolators has a silicon npn Planar phototransistor coupled to a GaAs diode. Each is mounted in a 6-pin plastic dual in-line package.

Glassolated™

High Current Transfer Ratio—Typically 50%
500 V to 2500 V Minimum Isolation

Input-To-Output
 $10^{11} \Omega$ Isolation Resistance
Low Coupling Capacitance—Typically 1.0 pF

Absolute Maximum Ratings

Maximum Temperature and Humidity

Storage Temperature*	-55°C to 150°C
Operating Temperature	-55°C to 100°C
Pin Temperature	
Soldering, 10 s*	260°C
Total Package Power Dissipation at $T_A = 25^\circ\text{C}$,	
LED plus Detector*	250 mW
Derate Linearly from 25°C*	3.3 mW/°C

Input Diode*

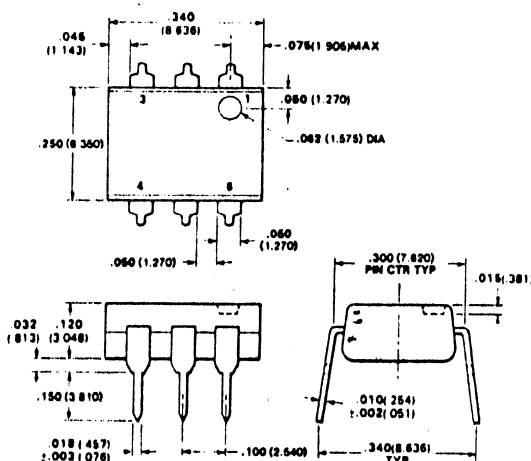
V_R *	Reverse Voltage	3.0 V
I_F *	Forward dc Current	80 mA
I_{pk} *	Peak Forward Current, 1 μs pulse width, 300 pps	3.0 A
P_D *	Power Dissipation at $T_A = 25^\circ\text{C}$	150 mW
	Derate Linearly from 25°C	2.0 mW/°C

Output Transistor

V_{CE} *	Collector-to-Emitter Voltage	30 V
V_{CB} *	Collector-to-Base Voltage	70 V
V_{EC} *	Emitter-to-Collector Voltage	7.0 V
P_D *	Power Dissipation at $T_A = 25^\circ\text{C}$	150 mW
	Derate Linearly from 25°C	2.0 mW/°C

*Indicates JEDEC registered values.

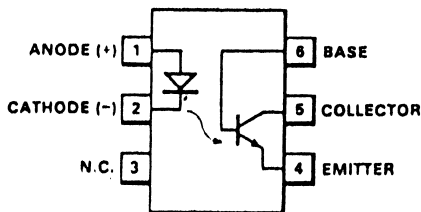
Package Outline



Notes

All dimensions in inches bold and millimeters (parentheses)
Tolerance unless specified = $\pm .015$ ($\pm .381$)

Connection Diagram DIP (Top View)



Pin

1	Anode (+)	} Input Diode
2	Cathode (-)	
3	NC	
4	Emitter	} Output npn Phototransistor
5	Collector	
6	Base	



Quality Semi-Conductors