

## 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\*

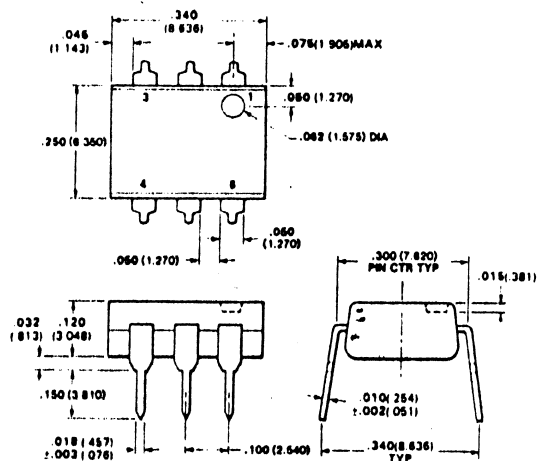
$V_R$ *	Reverse Voltage	3.0 V
$I_F$ *	Forward dc Current	80 mA
$I_{pk}$ *	Peak Forward Current, 1 $\mu\text{s}$ pulse width, 300 pps	3.0 A
$P_D$ *	Power Dissipation at $T_A = 25^\circ\text{C}$	150 mW
	Derate Linearly from 25°C	2.0 mW/°C

#### 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.

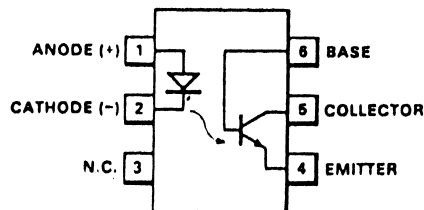
### Package Outline



### 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	

