

TECHNICAL DATA

DATA SHEET 4136, REV. B PRELIMINARY

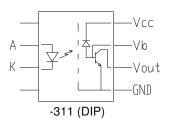
Transistor Output Optocoupler

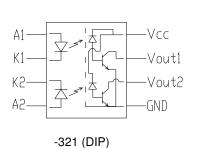
Features:

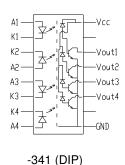
- Hermetic / Ceramic packages
- TTL Compatible
- Low Input Current
- Open Collector Output
- Wide Supply Range (to 30V)

Applications:

- Line Receivers
- High Speed Isolation
- Pulse Transformer Replacement
- Polarity Sensing







Absolute Maximum Ratings

PARAMETER		SYMBOL	RATING	UNIT
Input	Forward Current	I _F	25	mA
	Peak Forward Current	I _{FM}	50	mA
	Reverse Voltage	V _R 6		V
Output	Supply Voltage	V _{CEO}	5 to 30	V
	Output Voltage	V _{ECO}	5 to 20	V
	Current	I _C	8	mA
	Power Dissipation per channel	P _C	P _C 35	
Isolation Voltage**		V _{iso}	5000	V_{rms}
Operating Temperature		T _{opr}	-55 to +125	°C
Storage Temperature		T _{stg}	-55 to +150	°C
Soldering Temperature ***		T _{sol}	260	°C

^{* &}lt; 1 ms duration</p>

^{**} AC for 1 min, 40 to 60% RH

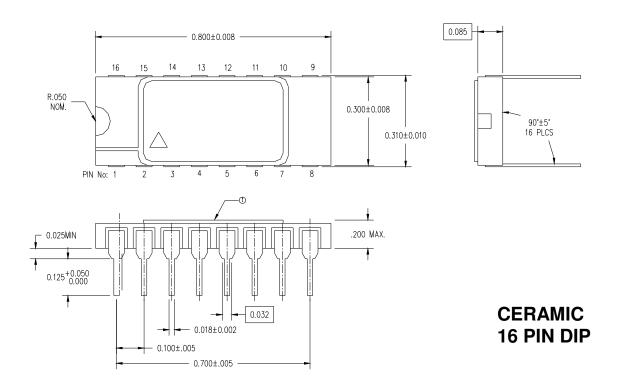
^{***} For 10 seconds

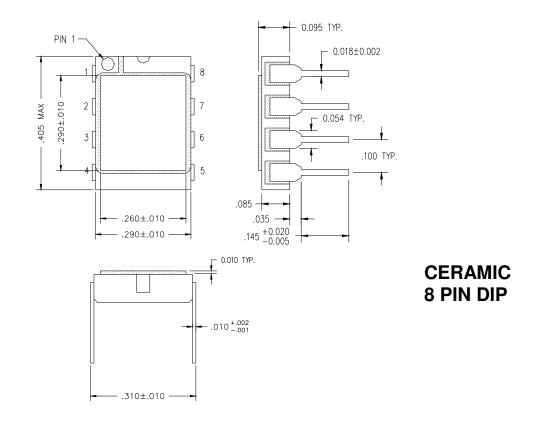


Electro-Optical Characteristics (-55° to 125°C)

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	V _F	I _F = 1 mA	-	1.5	1.8	V
Reverse Current	I _R	V _R = 4 V	-	-	12	μА
Reverse Breakdown Voltage	BV _R	I _R =15 μA	6	-	-	V
Logic Low Output Voltage	V _{OL}	I _{OL} = 5 mA	-	-	0.5	V
Logic High Output Current	I _{OH}	V _{CC} = 5.0V	-	-	.5	μА
Current Tranfer Ratio	CTR	$I_F = 1.6 \text{mA}$ $V_{CC} = 4.5 \text{V}$ $V_O = .4 \text{V}$	10	-	50	%
Isolation Resistance	R _{ISO}	500 V _{DC} , 40–60% RH	4x10 ¹⁰	10 ¹¹	-	Ω
Supply Current, low (per device)	I _{SL}	I _F =16mA, V _{CC} =15V	-	-	400	μА
Supply Current, high (per device)	I _{SH}	I _F =0mA, V _{CC} =15V	-	-	4	μА
Propagation Delay, low to high	t _{LH}	-	-	-	2	μS
Propagation Delay, high to low	t _{HL}	-	-	-	2	μS
Bandwidth	BW	-	-	3	-	MHz

SENSITRON SEMICONDUCTOR







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