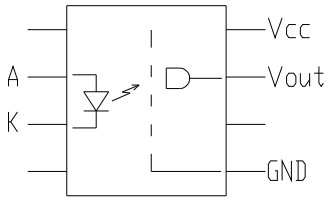
TECHNICAL DATA
DATA SHEET 4134, REV. B PRELIMINARY

High Speed CMOS Optocoupler

Features:

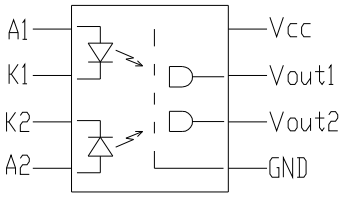
- **Hermetic / Ceramic packages**
- **Wide Operating Range (4.5V to 20V)**
- **300ns propagation delay**
- **5Mbd Typical Signal Rate**
- **Low Input Current (1.6mA to 1.8mA)**
- **CMOS Output**



-111 (DIP)

Applications:

- **High Speed Isolation**
- **Ground Loop Elimination**
- **Pulse Transformer Replacement**
- **High Speed Line Receiver**
- **Power Control Systems**



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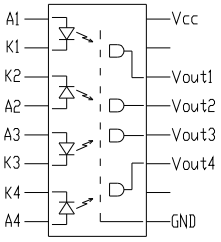


-141 (DIP)

Absolute Maximum Ratings

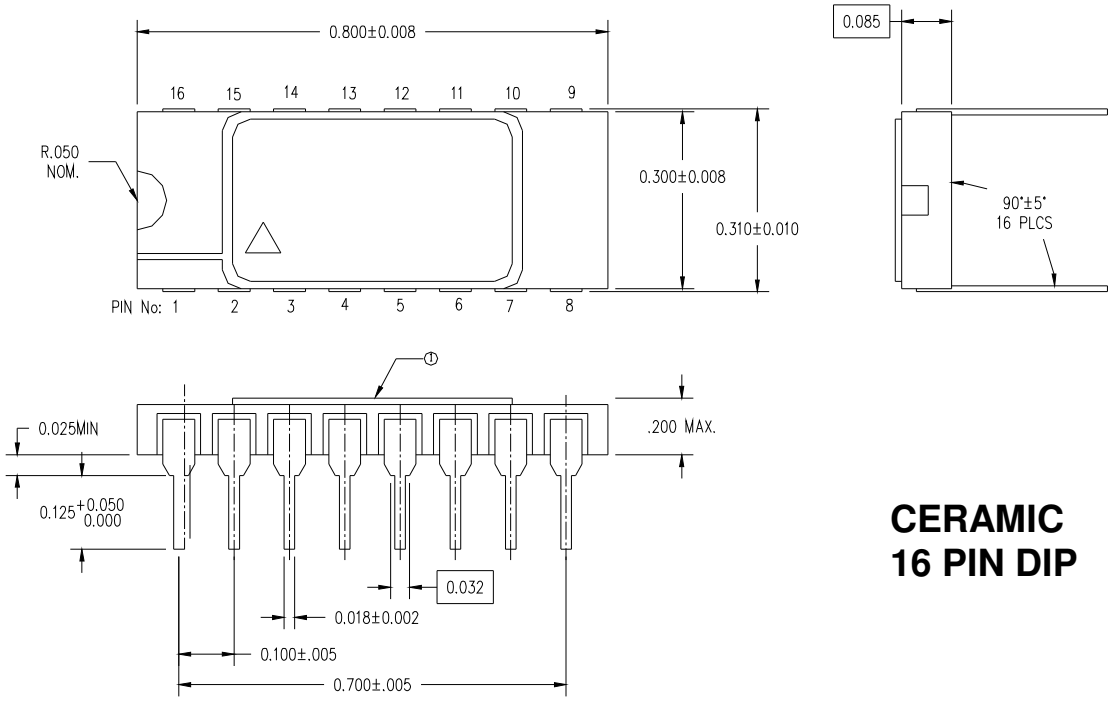
PARAMETER		SYMBOL	RATING	UNIT
Input	Forward Current	I_F	10	mA
	Peak Forward Current*	I_{FM}	25	mA
	Reverse Voltage	V_R	6	V
Output	Supply Voltage	V_{CEO}	0 to 20	V
	Output Voltage	V_{ECO}	-.5 to 20	V
	Current	I_C	25	mA
	Total Power Dissipation	P_C	200	mW
Isolation Voltage**		V_{iso}	5000	V_{rms}
Operating Temperature		T_{opr}	-55 to +125	°C
Storage Temperature		T_{stg}	-55 to +150	°C
Soldering Temperature***		T_{sol}	260	°C

* < 1 ms duration
** AC for 1 min, 40 to 60% RH

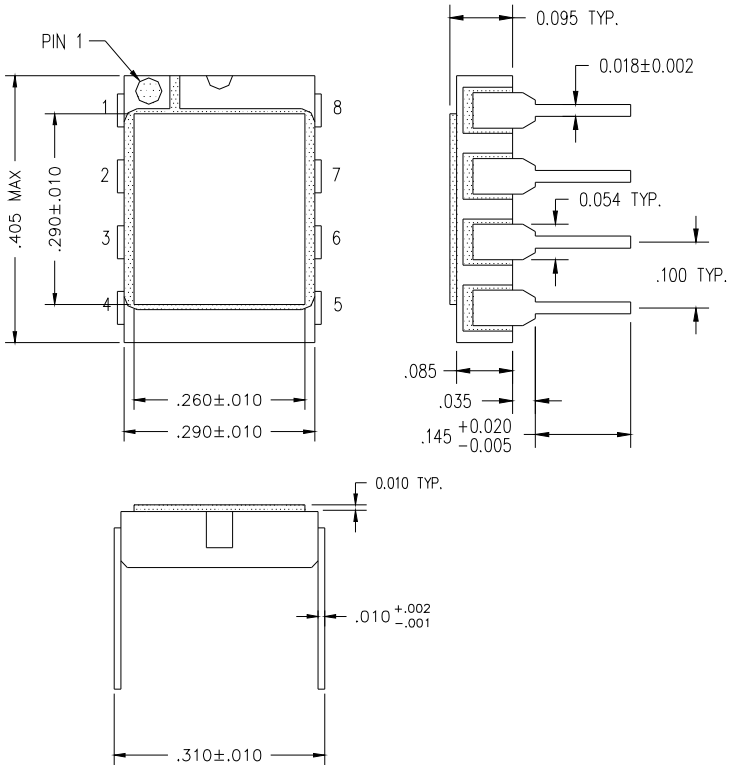
*** For 10 seconds

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

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	V_F	I_F= 1 mA	-	1.1	1.4	V
Reverse Current	I_R	V_R= 4 V	-	-	12	µA
Reverse Breakdown Voltage	BV_R	I_R=15 µA	6	-	-	V
Terminal Capacitance	C_t	V= 0, f=1 kHz	-	35	240	pF
Logic Low Output Voltage	V_{OL}	I_{OL} = 5 mA	-	-	0.5	V
Logic High Output Voltage	V_{OH}	I_{OH} = -2.5 mA	2.4	-	-	V
Isolation Resistance	R_{ISO}	500 V_{DC}, 40–60% RH	$4x10^{10}$	10^{11}	-	Ω
Floating Capacitance	C_F	f = 1MHz	-	0.6	1.0	pF
Supply Current, low (per device)	I_{SL}	I_F=0mA, V_{CC}=20V	-	-	7	mA
Supply Current, high (per device)	I_{SH}	I_F=5mA, V_{CC}=20V	-	-	5	mA
Propagation Delay, low to high	t_{LH}	-	-	-	300	ns
Propagation Delay, high to low	t_{HL}	-	-	-	300	ns
Rise Time	t_r	-	-	30	-	ns
Fall Time	t_f	-	-	7	-	ns



CERAMIC 16 PIN DIP



CERAMIC 8 PIN DIP

TECHNICAL DATA

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