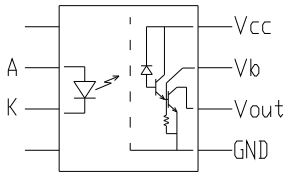
TECHNICAL DATA
DATA SHEET 4137, REV. B PRELIMINARY

High CTR Optocoupler

Features:

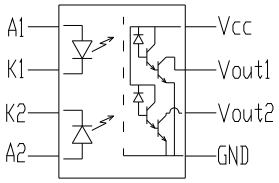
- **Hermetic / Ceramic packages**
- **LSTTL Compatible**
- **Low Input Current**
- **Open Collector Output**
- **High Current Transfer Ratio**



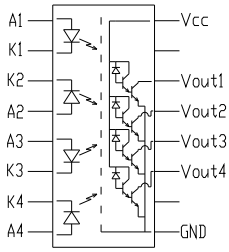
-411 (DIP)

Applications:

- **Low Current Line Receivers**
- **High Speed Isolation**
- **Pulse Transformer Replacement**
- **Polarity Sensing**
- **Level Shifting**



-421 (DIP)



-441 (DIP)

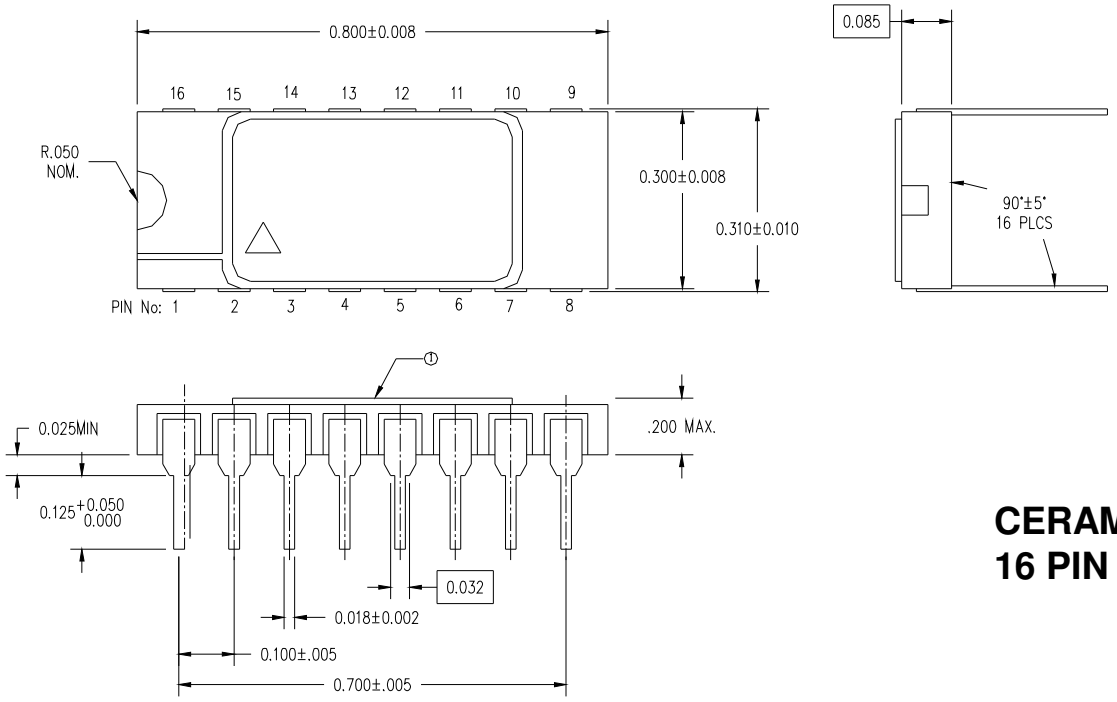
Absolute Maximum Ratings

PARAMETER		SYMBOL	RATING	UNIT
Input	Forward Current	I_F	20	mA
	Peak Forward Current*	I_{FM}	40	mA
	Reverse Voltage	V_R	6	V
Output	Supply Voltage	V_{CEO}	-.5 to 18	V
	Output Voltage	V_{ECO}	-.5 to 18	V
	Current (per channel)	I_C	60	mA
	Power Dissipation per channel	P_C	100	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

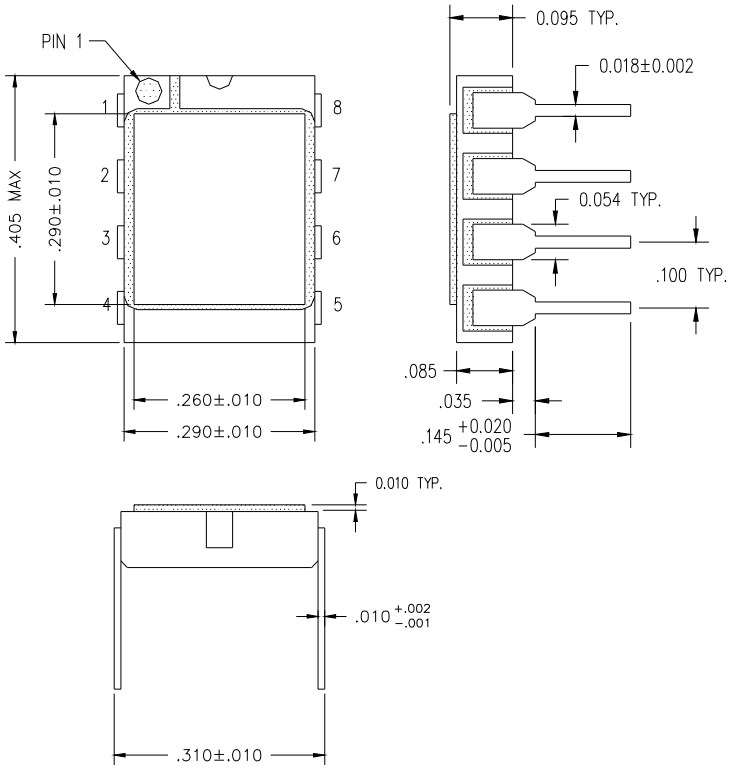
* < 1 ms duration
** AC for 1 min, 40 to 60% RH
*** For 10 seconds

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

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	V_F	I_F= 1 mA	-	1.5	1.8	V
Reverse Current	I_R	V_R= 4 V	-	-	12	µA
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} = 15V	-	-	100	µA
Current Tranfer Ratio	CTR	I_F = 1.6mA V_{CC} = 4.5V V_O = .4V	500	-	3000	%
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	-	-	3	mA
Supply Current, high (per device)	I_{SH}	I_F=0mA, V_{CC}=15V	-	-	25	µA
Propagation Delay, low to high	t_{LH}	-	-	-	100	µs
Propagation Delay, high to low	t_{HL}	-	-	-	100	µs



CERAMIC
16 PIN DIP



CERAMIC
8 PIN DIP

TECHNICAL DATA

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