

TECHNICAL DATA
DATA SHEET 4136, REV. A

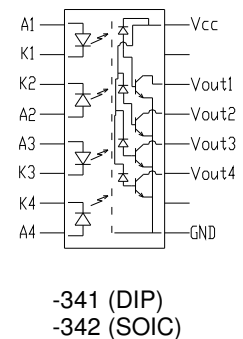
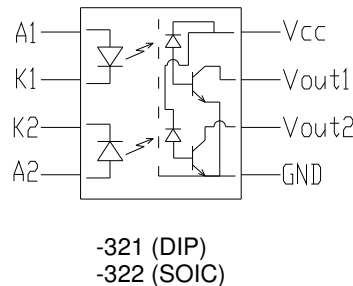
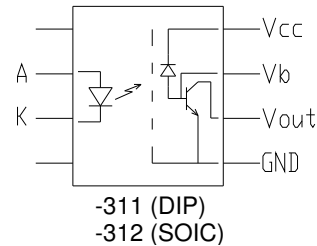
Transistor Output Optocoupler

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	35	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

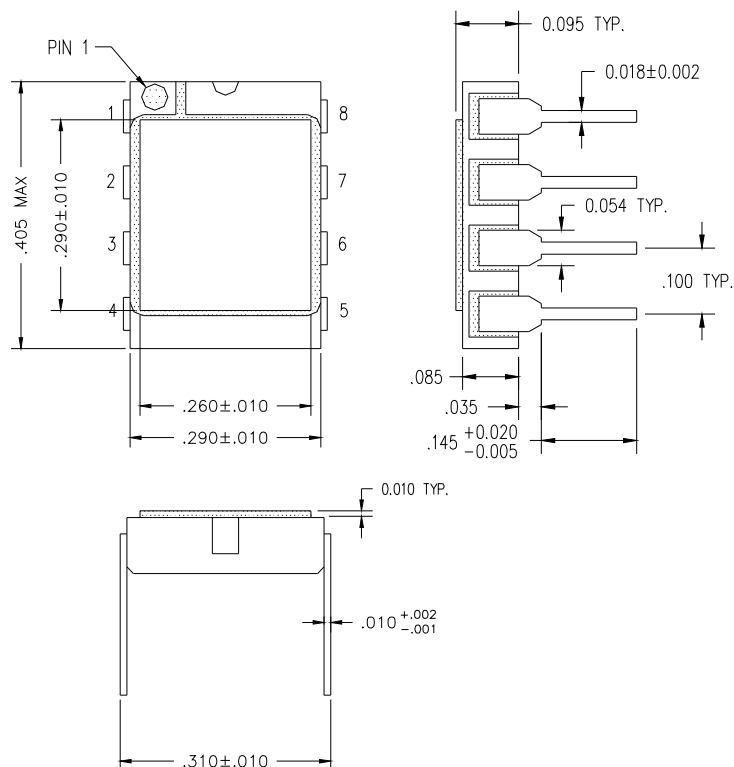
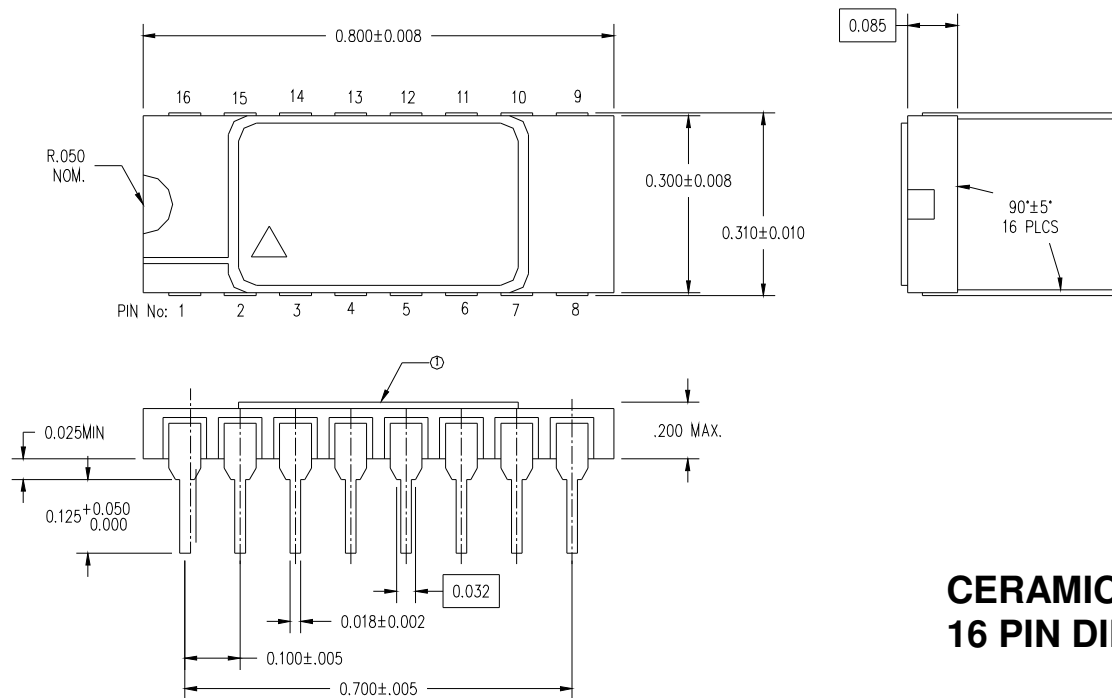
* < 1 ms duration

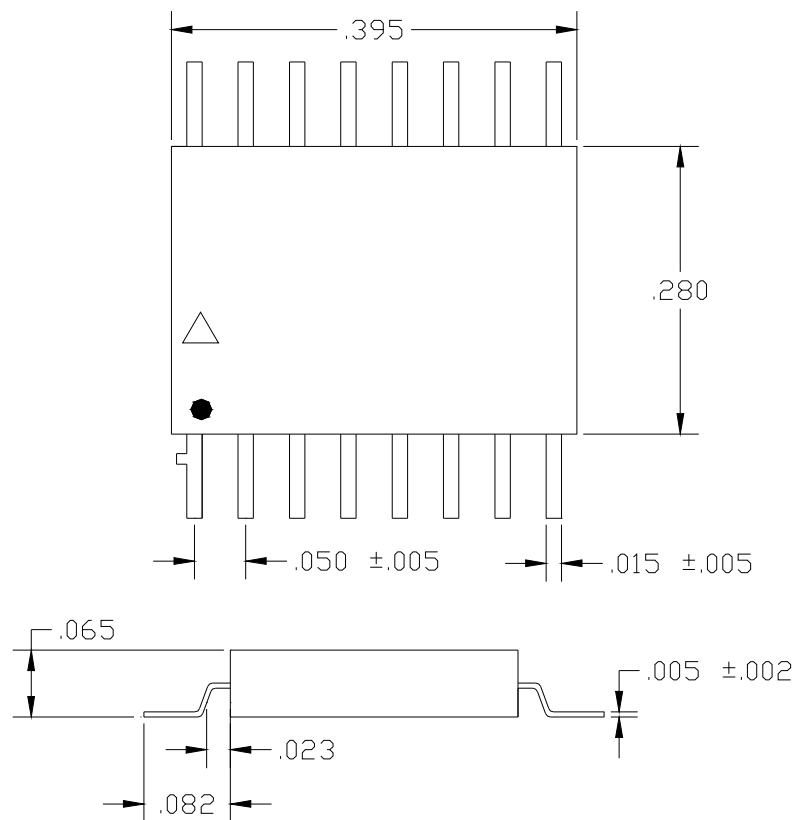
** AC for 1 min, 40 to 60% RH

*** For 10 seconds

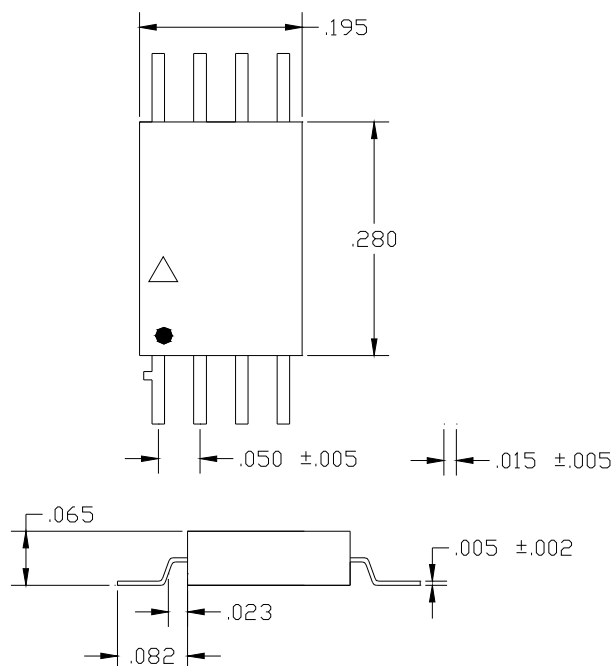
Electro-Optical Characteristics (–55° to 125°C)

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	V_F	$I_F = 1 \text{ mA}$	-	1.5	1.8	V
Reverse Current	I_R	$V_R = 4 \text{ V}$	-	-	12	μA
Reverse Breakdown Voltage	BV_R	$I_R = 15 \mu\text{A}$	6	-	-	V
Logic Low Output Voltage	V_{OL}	$I_{OL} = 5 \text{ mA}$	-	-	0.5	V
Logic High Output Current	I_{OH}	$V_{CC} = 5.0\text{V}$	-	-	.5	μA
Current Transfer 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	4×10^{10}	10^{11}	-	Ω
Supply Current, low (per device)	I_{SL}	$I_F = 16\text{mA}$, $V_{CC} = 15\text{V}$	-	-	400	μA
Supply Current, high (per device)	I_{SH}	$I_F = 0\text{mA}$, $V_{CC} = 15\text{V}$	-	-	4	μA
Propagation Delay, low to high	t_{LH}	-	-	-	2	μs
Propagation Delay, high to low	t_{HL}	-	-	-	2	μs
Bandwidth	BW	-	-	3	-	MHz





**CERAMIC
16 PIN SOIC**



**CERAMIC
8 PIN SOIC**