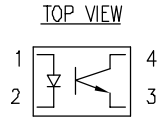
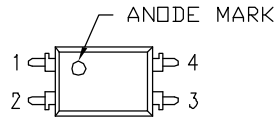


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PART NUMBER  
OCP-PCT114/X-TR

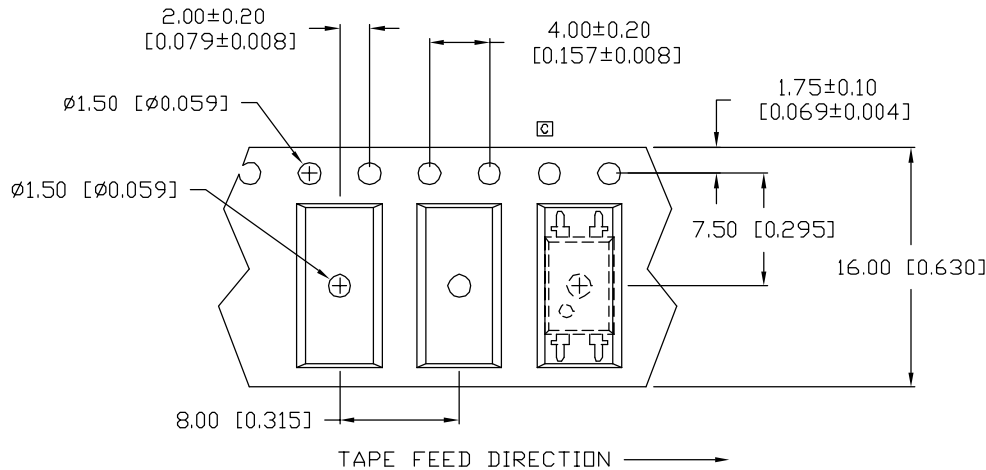
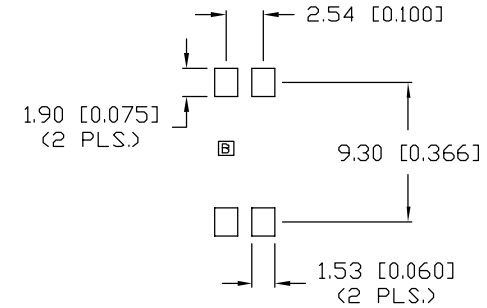
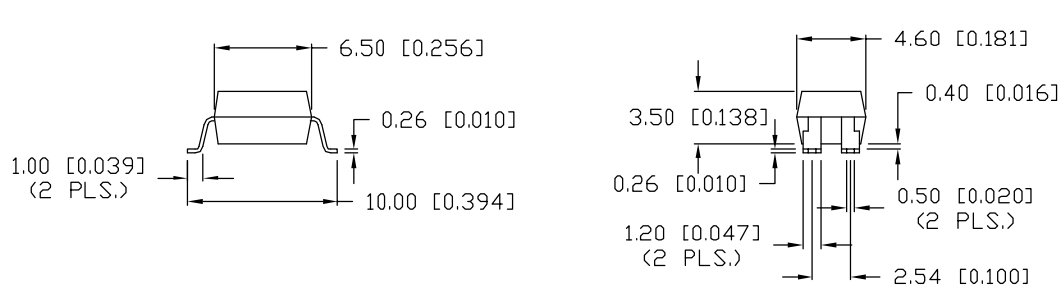
REV.  
E



- NOTES:
1. ANODE
  2. CATHODE
  3. EMITTER
  4. COLLECTOR

REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10BRDR. & #10776.	8.16.01
B	E.C.N. #10815.	12.3.01
C	E.C.N. #10894.	7.26.02
D	E.C.N. #11148.	5.16.07
E	E.C.N. #11148.	5.16.07

RECOMMENDED SOLDER PAD LAYOUT



PART NUMBER TABLE	
PART= /X	CTR (%)
/A	60 TO 160
/B	130 TO 260
/C	200 TO 400
/D	300 TO 600
/E	50 TO 600



\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.= +DECIMAL PRECISION MAX.= +0.00 -DECIMAL PRECISION

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REV. E PART NUMBER OCP-PCT114/X-TR  
FOUR PIN SURFACE MOUNT SINGLE CHANNEL PHOTOCOUPLER,  
TRANSISTOR OUTPUT WITHOUT EXTERNAL BASE CONNECTION.

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RELIABILITY NOTE  
OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.

**LUMEX**  
We have solutions to work for you  
INC.

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SCALE: N/A

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PART NUMBER		REV.
OCP-PCT114/X-TR		E
REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
	SEE PAGE 1.	

ELECTRO-OPTICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNITS
I FORWARD VOLTAGE	V <sub>F</sub>	I <sub>F</sub> =20mA	-	1.2	1.4	V
PEAK FORWARD VOLTAGE	V <sub>FM</sub>	I <sub>FM</sub> =0.5A	-	-	3.5	V
REVERSE CURRENT	I <sub>R</sub>	V <sub>R</sub> =4V	-	-	10	μA
TERMINAL CAPACITANCE	C <sub>t</sub>	V=0, f=1kHz	-	30	-	pF
O COLLECTOR DARK CURRENT	I <sub>CEO</sub>	V <sub>CE</sub> =20V	-	-	10 <sup>-7</sup>	A
T CURRENT TRANSFER RATIO	CRT	I <sub>F</sub> =2mA, V <sub>CE</sub> =5V	50	-	600	%
COLLECTOR-EMITTER SATURATION VOLTAGE	V <sub>CE(sat)</sub>	I <sub>F</sub> =20mA, I <sub>C</sub> =1mA	-	0.1	0.3	V
ISOLATION RESISTANCE	R <sub>ISO</sub>	DC500V	5x10 <sup>10</sup>	10 <sup>11</sup>	-	ohm
FLOATING CAPACITANCE	C <sub>f</sub>	V=0, f=1MHz	-	0.6	1.0	pF
CUT-OFF FREQUENCY	f <sub>c</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =2mA, R <sub>L</sub> =100ohm	-	80	-	kHz
RESPONSE TIME (RISE)	t <sub>r</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =2mA, R <sub>L</sub> =100ohm	-	5	20	μS
RESPONSE TIME (FALL)	t <sub>f</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =2mA, R <sub>L</sub> =100ohm	-	4	20	μS

I=INPUT, O=OUTPUT, T=TRANSFER CHARACTERISTICS.


ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	MAX	UNITS
I FORWARD CURRENT	I <sub>F</sub>	50	mA
PEAK FORWARD CURRENT	I <sub>FM</sub>	1	A
REVERSE VOLTAGE	V <sub>R</sub>	6	V
POWER DISSIPATION	P <sub>D</sub>	70	mW
O COLLECTOR-EMITTER VOLTAGE	V <sub>CEO</sub>	60	V
EMITTER-COLLECTOR VOLTAGE	V <sub>ECO</sub>	6	V
COLLECTOR CURRENT	I <sub>C</sub>	50	mA
COLLECTOR POWER DISSIPATION	P <sub>C</sub>	150	mW
TOTAL POWER DISSIPATION	P <sub>TOT</sub>	200	mW
ISOLATION VOLTAGE 1 MIN.	V <sub>ISO</sub>	5000	V <sub>RMS</sub>
OPERATING TEMPERATURE	T <sub>opr</sub>	- 30 TO + 100	°C
STORAGE TEMPERATURE	T <sub>stg</sub>	- 55 TO + 125	°C
SOLDERING TEMPERATURE	T <sub>sol</sub>	+ 260	°C
2.0mm FROM BODY			10 SEC. MAX

I=INPUT, O=OUTPUT.

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.=+DECIMAL PRECISION MAX.=+0.00 -0.00 -DECIMAL PRECISION

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FOUR PIN SURFACE MOUNT SINGLE CHANNEL PHOTOCOUPLER, TRANSISTOR OUTPUT WITHOUT EXTERNAL BASE CONNECTION.		<p>DRAWN BY: JC</p> <p>CHECKED BY:</p> <p>APPROVED BY:</p>	<p>DATE: 9.29.99</p> <p>PAGE: 2 OF 2</p> <p>SCALE: N/A</p>