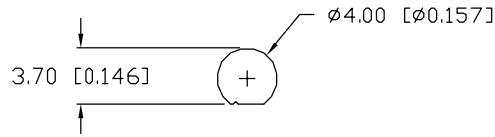
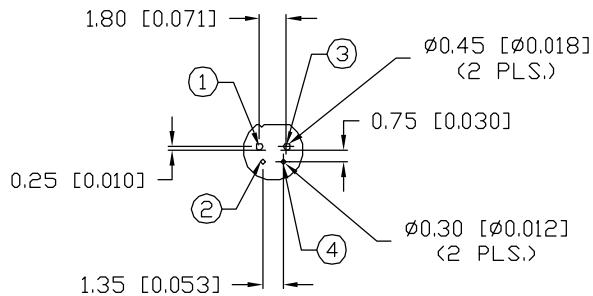
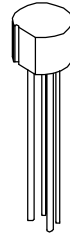
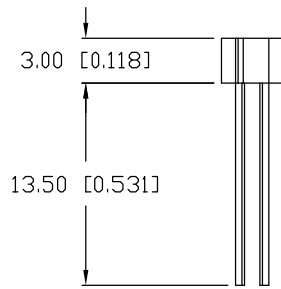
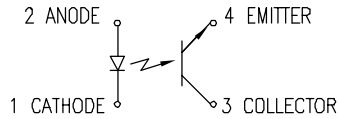


UNCONTROLLED DOCUMENT



TOP VIEW PIN LAYOUT



PART NUMBER  
OED-SR-2BC

REV.  
A

REV.	E.C.N. NUMBER AND REVISION COMMENTS	DATE
A	E.C.N. #10BRDR. & REDRAWN.	5.5.03

ELECTRO-OPTICAL CHARACTERISTICS  $T_A=25^\circ\text{C}$

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST COND
<b>INPUT:</b>						
PEAK WAVELENGTH			940		nm	
FORWARD VOLTAGE	$V_f$			1.2	V	$I_f = 10\text{ mA}$
REVERSE CURRENT	$I_r$			10	$\mu\text{A}$	$V_r = 5\text{ V}$
<b>OUTPUT:</b>						
COLLECTOR DARK CURRENT	$I_{ceo}$			0.1	$\mu\text{A}$	$V_{ce} = 10\text{ V}$
COLLECTOR LIGHT CURRENT	$I_L$		100		$\mu\text{A}$	$V_{ce} = 2\text{ V}$ $I_f = 4\text{ mA}$
LEAKAGE CURRENT	$I_{ceod}$			0.1	$\mu\text{A}$	$V_{ce} = 2\text{ V}$ $I_f = 4\text{ mA}$
<b>SWITCHING SPEEDS:</b>						
RIISING TIME	$T_r$		30		$\mu\text{S}$	$V_{cc} = 2\text{ V}$ $I_c = 0.1\text{ mA}$
FALLING TIME	$T_f$		30		$\mu\text{S}$	$R_l = 1\text{ K } \Omega$

LIMITS OF SAFE OPERATION AT  $25^\circ\text{C}$

PARAMETER	SYMBOL	MAX	UNITS
<b>INPUT:</b>			
REVERSE VOLTAGE	$V_r$	5	V
POWER DISSIPATION	$P_d$	75	mW
FORWARD CURRENT	$I_f$	50	mA
<b>OUTPUT:</b>			
COLLECTOR POWER DISSIPATION	$P_c$	75	mW
COLLECTOR CURRENT	$I_c$	20	mA
C-E VOLTAGE	$V_{ceo}$	30	V
E-C VOLTAGE	$V_{eco}$	3	V
OPERATING TEMP.	$T_{opr}$	-20 TO +90	$^\circ\text{C}$
STORAGE TEMP.	$T_{stg}$	-30 TO +100	$^\circ\text{C}$
SOLDERING TEMP.	$T_{sol}$	+260	$^\circ\text{C}$
2.0mm FROM BODY	dist.		5 SEC. MAX

\*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.  
A

PART NUMBER  
OED-SR-2BC

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REFLECTIVE PHOTO SENSOR.

**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.

DRAWN BY: CT	CHECKED BY:	APPROVED BY:	DATE: 12.30.97
			PAGE: 1 OF 1
			SCALE: N/A