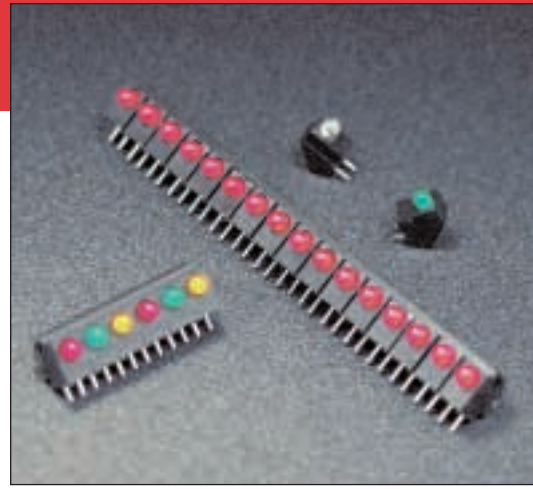


# RA Series T1 Right Angle LED Bar\*

\*Patented

## Special Features

- Customized to your specifications without tooling charges  
Variable LED spacing, minimum .180", maximum bar length 6"
- Available with 2 to 33 T1 LEDs in one convenient assembly
- Bar provides consistent alignment for multiple LED mounting
- Available with a variety of LEDs
- Bottom standoff facilitates board washing
- Wave solderable and chemically cleanable
- Housing and bar material UL 94V-0 rated

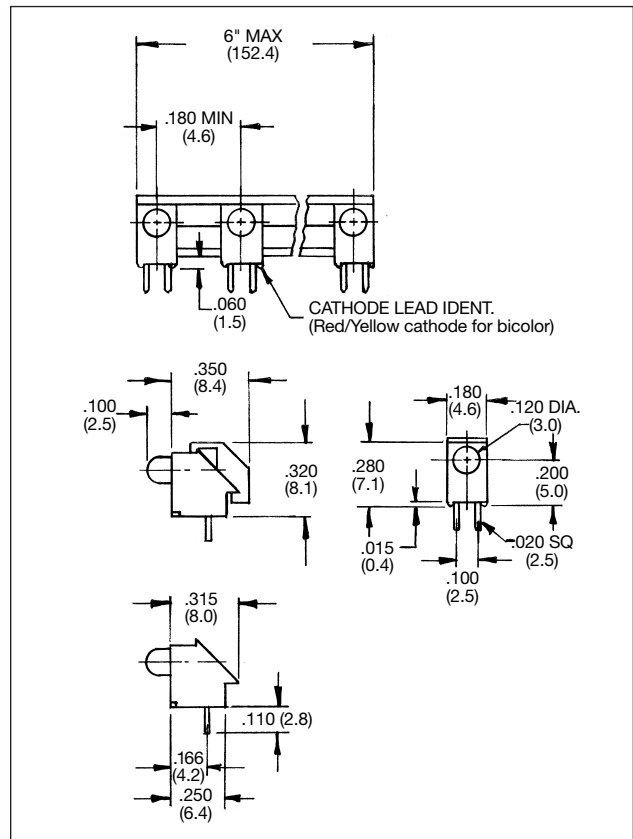


3mm PC Board Mount LEDs

## Electrical and Optical Characteristics (T<sub>A</sub>=25°C)

LED Part#	Color	Luminous Intensity (mcd) Typ.@I <sub>F</sub> (mA)		V <sub>F</sub> Typ.@I <sub>F</sub> (mA)		Viewing Angle 2Θ 1/2	Peak Wavelength (mm)	More LED Data Page#
<b>HIGH EFFICIENCY</b>								
1300	Yellow	6.0	10	2.0	10	60°	583	21
1301	Red	5.5	10	1.9	10	60°	635	21
1302	Green	5.0	10	2.1	10	60°	565	21
1313	Orange	5.5	10	1.9	10	60°	600	21
<b>LOW CURRENT</b>								
1303	Red	2.1	2	1.8	2	50°	635	22
1304	Yellow	1.6	2	1.9	2	50°	583	22
1305	Green	2.1	2	1.8	2	50°	565	22
<b>5V INTERNAL RESISTOR</b>								
1307	Red	8.0	10	5.0	10	60°	635	23
1308	Yellow	8.0	10	5.0	10	60°	583	23
1309	Green	8.0	10	5.0	10	60°	565	23
<b>BLUE</b>								
8310	Blue	25.0	20	4.5	20	60°	430	30
8311	Blue	55.0	20	4.5	20	20°	430	30
<b>BICOLOR</b>								
8901	Red	20.0	20	2.0	20	60°	625	27
	Green	20.0	20	2.2	20		565	
8903	Yellow	10.0	20	2.1	20	60°	590	27
	Green	20.0	20	2.2	20		565	
<b>ULTRA BRIGHT</b>								
1310	Red	45.0	20	1.9	20	45°	635	21
1311	Yellow	45.0	20	2.1	20	45°	583	21
1312	Green	45.0	20	2.2	20	45°	565	21
1315	Red	45.0	20	1.8	20	60°	645	21
<b>SUPER ULTRA BRIGHT</b>								
8306	Green	200.0	20	2.2	20	50°	565	29
8312	Yellow	700.0	20	2.0	20	50°	595	29
8313	Red	800.0	20	1.85	20	50°	660	29

## Package Dimensions



All Dimensions are in inches (mm)  
Standard Polarity shown in drawing: Cathode right

## How To Order

INDIVIDUAL RA LEDs		MULTIPLE RA LEDs ON A BAR	
R A X	X X X X	X R A X	X X X X X X X
LED Color Red = R Yellow = Y Green = G Orange = O Bicolor = B Blue = L	(See LED Chart)	# of LEDs Per Bar	Center to Center Spacing of LEDs in inches (If spacing varies, use SPL)
		LED Color Red = R Yellow = Y Green = G Orange = O Bicolor = B Blue = L Multiple = M	See LED Chart For Part # (Use MCOO for multiple colors)



WILBRECHT  
ELECTRONICS, INC.

LED  
DIVISION