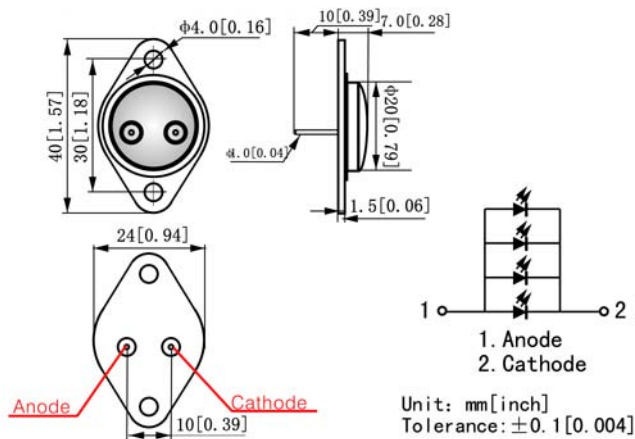


# TO3A4-Hx-180 SERIES

## TECHNICAL DATA

### HIGH POWER LED

Design: 4 parallel power LED chips  
 Package: TO3 with clear epoxy resin



### Optical-Electrical Characteristics (Tc = 25°C)

Item	Chip Material	Emitting Color	Lens Type	Operating Voltage [V]		Dominant Wavelength [nm]		Luminous Flux [lm]	Optical Power [mW]	Reverse Current [μA] V <sub>R</sub> = 5 V	Viewing Angle [°] 2θ <sub>½</sub>
				Min	Max	Min	Max				
TO3A4-HW-180	InGaN	White *)	Clear	3.2	4.0	-	-	88	-	<300	180
TO3A4-HU-180	InGaN	UV	Clear	4.0	4.5	395	405	-	60	<300	180
TO3A4-HB-180	InGaN	Blue	Clear	3.2	4.0	460	470	24	90	<300	180
TO3A4-HG-180	InGaN	Cyan	Clear	3.2	4.0	500	510	72	80	<300	180
TO3A4-HG-180	InGaN	Green	Clear	3.2	4.0	515	525	72	50	<300	180
TO3A4-HY-180	AlGaInP	Yellow	Clear	2.2	2.6	585	595	64	60	<300	180
TO3A4-HR-180	AlGaInP	Red	Clear	2.1	2.5	625	635	48	110	<300	180
TO3A4-H850-180	GaAlAs	IR	Clear	1.8	1.9	840	850	-	260	<300	180
TO3A4-H880-180	GaAlAs	IR	Clear	1.8	1.9	870	880	-	200	<300	180
TO3A4-H940-180	GaAs	IR	Clear	1.6	1.7	940	950	-	150	<300	180

\*) TO3A4-HW-180-S optional Warm White

### IMPORTANT NOTE FOR SAFE OPERATION

This high power LED must be cooled! Use a heat sink with a thermal resistance ≤8K/W. Maximum uncooled allowed operation current ≤150 mA. Do not view directly into the emitting area of the LED when in operation!



**ROITHNER LASERTECHNIK**