Tectonic LED Corporation

Founded in October 2004, Tectonic Opto Technology Corporation is a professional manufacturer of LED packaging, dedicated to the research, development, and manufacturing of mid-to-high-power, high-reliability LED packaging. Through our products, we create value for our customers with best-in-class optics and heat dissipation. The main applications of our products include semiconductor lighting, backlighting for medium-to-large TFT LCD panels, flashlights for high-definition digital cameras and cell phones, handheld lights, lighting for high-resolution indoor and outdoor billboard displays, automotive lighting, other special-purpose lighting, etc.

contents

Mid- and High-Power LEDs

Trab series 0.2~1 Watt Emitter

The Tectonic Trab series, a small type SMT power LED (4×5×1.5mm) with an enhanced heat dissipation capability, enables a lower and higher drive current (60/80/150/350mA). The package is extremely reliable and has a long operating lifetime with minimum degradation due to advanced silicon resin material. With its miniature size and power ratings, trab series offers customers the future of new generation lighting fixture.

Main Applications

Fluorescent lighting
Striplights
Channel and counter lighting
Decoration lighting

Features

High junciton temperature: 120°c
Storage and operating temperature:- 40 to +120
Compatible with IR reflow soldering processes
Super wide viewing angle:140°
Best moisture sensitivity level:JEDEC 2a

0.2 / 0.3 Watt Trab

Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test. Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TP6N-TLWE-3	White	M/N	20	60mA	2.8	3.2	3.8	4100~10000K	Lambertian 2θ½=140°
TP6N-TLVE-3	Warm White	M/N	18		2.8	3.2	3.8	2700~4100K	
TP6N-TLWE	White	L/M	16.0	80mA	3.3	3.6	3.9	4100~10000K	
TP6N-TLVE	Warm White	L/M	14.8		3.3	3.6	3.9	2700~4100K	
TP6N-TLBE	Blue	C/D	2.3		3.3	3.6	3.9	455~475nm	
TP6N-TLGE	Green	K/L	13.9		3.3	3.7	4.1	515~535nm	
TP6N-TLAE	Amber	H/J	8.2		2.0	2.4	3.0	587~597nm	
TP6N-TLRE	Red	H/J	8.2		2.0	2.4	3.0	613.5~631nm	

High Efficiency 120lm/W

0.5 Watt Trab

Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test. Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TP6N-FLWE	White	N/P/Q	35	150mA	2.8	3.5	4.3	4100~10000K	Lambertian 2θ½=140°
TP6N-FLVE	Warm White	N/P/Q	33		2.8	3.5	4.3	2700~4100K	
TP6N-FLBE	Blue	H/J	7.3		2.8	3.5	4.3	455~475nm	
TP6N-FLGE	Green	N/P	27		2.8	3.5	4.3	515~535nm	
TP6N-FLAE	Amber	M/N	21		1.9	2.2	3.1	587~597nm	
TP6N-FLRE	Red	L/M	17		1.9	2.2	3.1	613.5~631nm	
TP6N-FLWE-3SC	White	N/P/Q	35	50mA	9.9	11.1	12.0	4100~10000K	
TP6N-FLVE-3SC	Warm White	N/P/Q	33		9.9	11.1	12.0	2700~4100K	

1 Watt Trab

Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test. Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TP6N-1LWE	White	R/S1/S2/T1/T2	82	350mA	2.8	3.5	4.3	4100~10000K	Lambertian 2θ½=140°
TP6N-1LVE	Warm White	R/S1/S2/T1/T2	78		2.8	3.5	4.3	2700~4100K	
TP6N-1LBE	Blue	L/M	16		2.8	3.5	4.3	455~475nm	
TP6N-1LGE	Green	S2/T1	72		2.8	3.5	4.3	515~535nm	
TP6N-1LAE	Amber	Q/R	46		1.9	2.2	3.1	587~597nm	
TP6N-1LRE	Red	Q/R	44		1.9	2.2	3.1	613.5~631nm	

Remark: Flat lens is available

Tricorn Series 1~5 Watt

The Tricorn series is designed with Tectonic opto's own packaging technology. The package is extremely reliable and has a long operating lifetime with minimum degradation due to advanced silicon resin material and the very low thermal resistance. With its advanced packing process and great color uniformity, Tricorn series is introduced to satisfy the various solid-state lighting. Available in cool white, warm white, blue, green, amber, red, crimson, royal blue and UV.

Main Applications

Commercial ligting
Mine lighting
Portable flashlight
Reading lights(Car, train, aircraft)
Plant growing lights

Features

High junciton temperature: 120°c
Storage and operating temperature:- 40 to +105
Compatible with IR reflow soldering processes
Super wide viewing angle:140°
Best moisture sensitivity level:JEDEC 2a
Good color uniformity
Superior ESD protection

1 Watt Tricorn

Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TG1N-1LWE TG1C-1LWE	White	S1/S2/T1/T2	82	350mA	2.8	3.5	4.3	4100~10000K	Lambertian 2θ½=140°
TG1N-1LVE TG1C-1LVE	Warm White	S1/S2/T1/T2	78		2.8	3.5	4.3	2700~4100K	
TG1N-1LBE TG1C-1LBE	Blue	L/M	16		2.8	3.5	4.3	455~475nm	
TG1N-1LGE TG1C-1LGE	Green	S2/T1	72		2.8	3.5	4.3	515~535nm	
TG1N-1LAE TG1C-1LAE	Amber	Q/R	46		1.9	2.2	3.1	587~597nm	
TG1N-1LRE TG1C-1LRE	Red	Q/R	39		1.9	2.2	3.1	613.5~631nm	
TG1N-1LME TG1C-1LME	Crimson	L/M/N	21		1.9	2.2	3.1	635~645nm	
TG1N-1LDE TG1C-1LDE	Royal Blue	M/N/P	385mW		2.8	3.5	4.3	445~460nm	
TG1N-1LLE TG1C-1LLE	UV	J/K/L/M	250mW		3.0	3.6	4.3	390~410nm	

3 Watt Tricorn

Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TG1N-3LWE-SD TG1C-3LWE-SD	White	U2/V1/V2	139	700mA	3.2	3.8	4.3	4100~10000K	Lambertian 2θ½=140°
TG1N-3LVE-SD TG1C-3LVE-SD	Warm White	U2/V1/V2	132		3.2	3.8	4.3	2700~4100K	
TG1N-3LBE-SD TG1C-3LBE-SD	Blue	N/P/Q	35		3.2	3.8	4.3	455~475nm	
TG1N-3LGE-SD TG1C-3LGE-SD	Green	U2/V1	122		3.2	3.9	4.3	515~535nm	
TG1N-3LAE-SD TG1C-3LAE-SD	Amber	T1/T2/U1	94		2.1	2.7	3.3	587~597nm	
TG1N-3LRE-SD TG1C-3LRE-SD	Red	S2/T1/T2	82		2.1	2.7	3.3	613.5~631nm	
TG1N-3LME-SD TG1C-3LME-SD	Crimson	N/P/Q	35		1.9	2.4	3.1	635~645nm	
TG1N-3LDE-SD TG1C-3LDE-SD	Royal Blue	Q/R/S	695mW		3.2	3.8	4.3	445~460nm	
TG1N-3LLE TG1C-3LLE	UV	M/N/P	385mW		3.0	3.6	4.3	390~410nm	

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ISO 9001:2000 Products RoHs Compliance

Environmental Compliance

4 Watt Tricorn

Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TG1N-4LWE-SD TG1C-4LWE-SD	White	W1/W2/X1	205	1000mA	3.3	3.8	4.5	4100~10000K	Lambertian 2θ½=140°
TG1N-4LVE-SD TG1C-4LVE-SD	Warm White	W1/W2/X1	185		3.3	3.8	4.5	2700~4100K	
TG1N-4LWE-3SC	White	W1/W2/X1	205	350mA	8.4	10.5	12.0	4100~10000K	
TG1N-4LVE-3SC	Warm White	W1/W2/X1	195		8.4	10.5	12.0	2700~4100K	

5 Watt Tricorn

Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TG1N-5LWE TG1C-5LWE	White	X1/X2/Y1/Y2	305	700mA	5.6	7.0	8.6	4100~10000K	Lambertian 2θ½=140°
TG1N-5LVE TG1C-5LVE	Warm White	X1/X2/Y1/Y2	279		5.6	7.0	8.6	2700~4100K	
TG1N-5LBE TG1C-5LBE	Blue	R/S1/S2	63		5.6	7.0	8.6	455~475nm	
TG1N-5LGE TG1C-5LGE	Green	X1/X2/Y1	267		5.6	7.0	8.6	515~535nm	
TG1N-5LAE TG1C-5LAE	Amber	U2/V1/V2	139		3.8	4.4	6.2	587~597nm	
TG1N-5LRE TG1C-5LRE	Red	U2/V1/V2	145		3.8	4.4	6.2	613.5~631nm	
TG1N-5LDE TG1C-5LDE	Royal Blue	U/V/W	1313mW		5.6	7.0	8.6	445~460nm	

Tricorn High CRI LED

Tricorn High CRI LED is designed for the applications of commercial light, indoor and outdoor decorations.
The package is capable of being driven at a current from 350mA up to 1000mA.

Tricorn High CRI

Part Number	Color	CRI Typical	Typ. Lumens (lm)			Vf(V)			CCT or Wavelength	Radiation Pattern
			Test @350mA	Test @700mA	Test @1000mA	Min.	Typ.	Max.		
TG1C-1LVE-R7	Warm White	75	65	--	--	2.8	3.5	4.3	2700~4100K	Lambertian 2θ½=140°
TG1C-3LVE-R7			--	115	--	3.2	3.8	4.3		
TG1C-4LVE-R7			70	120	165	3.3	3.8	4.5		
TG1C-5LVE-R7			--	230	--	5.6	7.0	8.6		
TG1C-1LVE-R8		85	50	--	--	2.8	3.5	4.3	2700~4100K	
TG1C-3LVE-R8			--	85	--	3.2	3.8	4.3		
TG1C-4LVE-R8			53	93	120	3.3	3.8	4.5		

Teceon Series 1~4 Watt Emitter

Main Applications

Entertainment lighting:Stage lights
Architectural lighting: Wall washer
Spotlights

Features

High junciton temperature: 120°c
Storage and operating temperature:- 40 to +105
Compatible with IR reflow soldering processes:PM2L series only
Super wide viewing angle:130°
Best moisture sensitivity level:JEDEC 2a
Superior ESD protection

1 Watt Teceon

Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TM2A-1LWE TM2L-1LWE	White	R/S1/S2/T1/T2/U1	94	350mA	2.8	3.5	4.3	4100~10000K	Lambertian 2θ½=130°
TM2A-1LVE TM2L-1LVE	Warm White	R/S1/S2/T1/T2/U1	89		2.8	3.5	4.3	2700~4100K	
TM2A-1LBE TM2L-1LBE	Blue	L/M/N	21		2.8	3.5	4.3	455~475nm	
TM2A-1LGE TM2L-1LGE	Green	S2/T1/T2	82		2.8	3.5	4.3	515~535nm	
TM2A-1LAE TM2L-1LAE	Amber	Q/R/S1	55		1.9	2.2	3.1	587~597nm	
TM2A-1LRE TM2L-1LRE	Red	Q/R/S1	47		1.9	2.2	3.1	613.5~631nm	

3 Watt Teceon

Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TM2A-3LWE-SD TM2L-3LWE-SD	White	U2/V1/V2/W1	158	700mA	3.2	3.8	4.3	4100~10000K	Lambertian 2θ½=130°
TM2A-3LVE-SD TM2L-3LVE-SD	Warm White	U2/V1/V2/W1	150		3.2	3.8	4.3	2700~4100K	
TM2A-3LBE-SD TM2L-3LBE-SD	Blue	P/Q/R	46		3.2	3.8	4.3	455~475nm	
TM2A-3LGE-SD TM2L-3LGE-SD	Green	U2/V1/V2	139		3.2	3.9	4.3	515~535nm	
TM2A-3LAE-SD TM2L-3LAE-SD	Amber	T1/T2/U1	94		2.1	2.7	3.3	587~597nm	
TM2A-3LRE-SD TM2L-3LRE-SD	Red	T1/T2	82		2.1	2.7	3.3	613.5~631nm	

4 Watt Teceon

Part Number	Color	Photometric Luminous Flux Bin	Typ. Lumens (lm)			Vf(V)			CCT or Wavelength	Radiation Pattern
			Test @350mA	Test @700mA	Test @1000mA	Min.	Typ.	Max.		
TM2A-4LWE-SD TM2L-4LWE-SD	White	W2/X1/X2	90	158	210	3.3	3.8	4.5	4100~10000K	Lambertian 2θ½=130°
TM2A-4LVE-SD TM2L-4LVE-SD	Warm White	W2/X1/X2	82	143	190	3.3	3.8	4.5	2700~4100K	

Lannern Fire series 1~5Watt

Main Applications

Exterior automotive:Tail combination lamps
Speciality lights
Decoration lights

Features

High junciton temperature: 120°c
Storage and operating temperature:- 40 to +105
Compatible with IR reflow soldering processes
Super narrow viewing angle: 70°
Best moisture sensitivity level: JEDEC 2a
Superior ESD protection

1 Watt Lannern Fire

Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TG1N-1DWE TG1A-1DWE	White	S1/S2/T1/T2	82	350mA	2.8	3.5	4.3	4100~10000K	Dome 2θ½=70°
TG1N-1DVE TG1A-1DVE	Warm White	S1/S2/T1/T2	78		2.8	3.5	4.3	2700~4100K	
TG1N-1DBE TG1A-1DBE	Blue	L/M	16		2.8	3.5	4.3	455~475nm	
TG1N-1DGE TG1A-1DGE	Green	S2/T1	72		2.8	3.5	4.3	515~535nm	
TG1N-1DAE TG1A-1DAE	Amber	Q/R	46		1.9	2.2	3.1	587~597nm	
TG1N-1DRE TG1A-1DRE	Red	Q/R	44		1.9	2.2	3.1	613.5~631nm	
TG1N-1DME	Crimson	L/M/N	21		1.9	2.2	3.1	635~645nm	

3 Watt Lannern Fire

Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TG1N-3DWE-SD TG1A-3DWE-SD	White	U2/V1/V2	139	700mA	3.2	3.8	4.3	4100~10000K	Dome 2θ½=70°
TG1N-3DVE-SD TG1A-3DVE-SD	Warm White	U2/V1/V2	132		3.2	3.8	4.3	2700~4100K	
TG1N-3DBE-SD TG1A-3DBE-SD	Blue	N/P/Q	35		3.2	3.8	4.3	455~475nm	
TG1N-3DGE-SD TG1A-3DGE-SD	Green	U2/V1	122		3.2	3.9	4.3	515~535nm	
TG1N-3DAE-SD TG1A-3DAE-SD	Amber	T1/T2/U1	94		2.1	2.7	3.3	587~597nm	
TG1N-3DRE-SD TG1A-3DRE-SD	Red	S2/T1/T2	82		2.1	2.7	3.3	613.5~631nm	
TG1N-3DME-SD	Crimson	N/P/Q	35		1.9	2.4	3.1	635~645nm	

4 Watt Lannern Fire

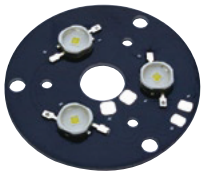
Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TG1N-4DWE-SD TG1A-4DWE-SD	White	W1/W2/X1	205	1000mA	3.3	3.8	4.5	4100~10000K	Dome 2θ½=70°
TG1N-4DVE-SD TG1A-4DVE-SD	Warm White	W1/W2/X1	185		3.3	3.8	4.5	2700~4100K	

5 Watt Lannern Fire

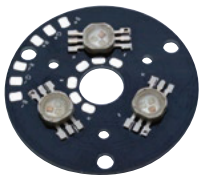
Part Number	Color	Photometric Luminous Flux Bin	Lumens Flux(typ.)	Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
					Min.	Typ.	Max.		
TG1N-5DWE TG1A-5DWE	White	X1/X2/Y1/Y2	305	700mA	5.6	7.0	8.6	4100~10000K	Dome 2θ½=70°
TG1N-5DVE TG1A-5DVE	Warm White	X1/X2/Y1/Y2	279		5.6	7.0	8.6	2700~4100K	
TG1N-5DBE TG1A-5DBE	Blue	R/S1/S2	63		5.6	7.0	8.6	455~475nm	
TG1N-5DGE TG1A-5DGE	Green	X1/X2/Y1	267		5.6	7.0	8.6	515~535nm	
TG1N-5DAE TG1A-5DAE	Amber	U2/V1/V2	139		3.8	4.4	6.2	587~597nm	
TG1N-5DRE TG1A-5DRE	Red	U2/V1/V2	145		3.8	4.4	6.2	613.5~631nm	

Module series-LED family

Circular arrays of 3 and 6 Prolight light source provides with highly efficient PMMA secondary optics for tight beam control.
Customized module design is available, that enables you to create never before possible lighting applications.
Available in cool white, warm white, blue, green, amber, red, and tri-color in 1.

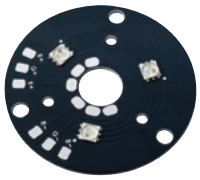


Tricorn triple module



TL6M-Tri Color triple module

TG1N-3N25



Trab triple module
TP6M-Tri color triple mudule

TG1M-1LWP-3SCW

TG1N-3N06
Please see the page of Collimator Lens- LED family

TG1N-3N15

Tricorn Triple Module

Part Number	Color	Power Description	Lumens		Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
			Min.	Typ.		Min.	Typ.	Max.		
TG1M-1LWP-3SC	White	3W Single color	155.0	216.0	350mA	8.4	10.5	12.9	4100~10000K	Lambertian 2θ½=140°
TG1M-1LVP-3SC	Warm White		155.0	204.0		8.4	10.5	12.9	2700~4100K	
TG1M-1LBP-3SC	Blue		32.0	42.0		8.4	10.5	12.9	455~475nm	
TG1M-1LGP-3SC	Green		177.0	198.0		8.4	10.5	12.9	515~535nm	
TG1M-1LAP-3SC	Amber		92.0	126.0		5.7	6.6	9.3	587~597nm	
TG1M-1LRP-3SC	Red		92.0	120.0		5.7	6.6	9.3	613.5~631nm	
TG1M-1LFP-3	Red	3W R/G/B mixed	30.6	40.0		1.9	2.2	3.1	613.5~631nm	
	Green		58.9	66.0		2.8	3.5	4.3	515~535nm	
	Blue		10.7	14.0		2.8	3.5	4.3	455~475nm	
TG1M-3LWP-3SC	White	9W Single color	299.0	375.0	700mA	9.6	11.4	12.9	4100~10000K	
TG1M-3LVP-3SC	Warm White		299.0	354.0		9.6	11.4	12.9	2700~4100K	
TG1M-3LBP-3SC	Blue		54.0	78.0		9.6	11.4	12.9	455~475nm	
TG1M-3LGP-3SC	Green		299.0	342.0		9.6	11.7	12.9	515~535nm	
TG1M-3LAP-3SC	Amber		202.0	252.0		6.3	8.1	9.9	587~597nm	
TG1M-3LRP-3SC	Red		177.0	228.0		6.3	8.1	9.9	613.5~631nm	
TG1M-3LFP-3	Red	9W R/G/B mixed	58.9	76.0		2.1	2.7	3.3	613.5~631nm	
	Green		99.6	114.0		3.2	3.9	4.3	515~535nm	
	Blue		18.1	26.0		3.2	3.8	4.3	455~475nm	

Trab Triple Module

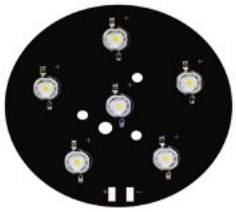
Part Number	Color	Power Description	Lumens		Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
			Min.	Typ.		Min.	Typ.	Max.		
TP6M-1LWP-3SC	White	3W Single color	119.0	228.0	350mA	8.4	10.5	12.9	4100~10000K	Lambertian 2θ½=140°
TP6M-1LVP-3SC	Warm White		119.0	216.0		8.4	10.5	12.9	2700~4100K	
TP6M-1LBP-3SC	Blue		32.0	42.0		8.4	10.5	12.9	455~475nm	
TP6M-1LGP-3SC	Green		177.0	198.0		8.4	10.5	12.9	515~535nm	
TP6M-1LAP-3SC	Amber		92.0	126.0		5.7	6.6	9.3	587~597nm	
TP6M-1LRP-3SC	Red		92.0	120.0		5.7	6.6	9.3	613.5~631nm	

TECTONIC LED CORP.

ISO 9001:2000 Products RoHs Compliance

Main Applications

Residential lighting
Par lights
Table lighting
Color Changing lighting
Garden lighting



Sextuplet Module

TG1C-6A20-AW

TG1C-6A30-AW

Sextuplet Module CRI 70

Part Number	Color	Power Description	Collimator Part#	Angle	Typ. Lux @1m	Test Current	Vf(V)			CCT or Wavelength
							Min.	Typ.	Max.	
TGCS-3LWP-006A07A	White	18W	PG1C-6A20-AW	20°	6000	700mA	19.2	22.8	25.8	4100~10000K
TGCS-3LWP-006A07A	White	18W	PG1C-6A30-AW	30°	3000		19.2	22.8	25.8	2700~4100K
TGCS-3LVP-006A07A	Warm White	18W	PG1C-6A20-AW	20°	5400		19.2	22.8	25.8	4100~10000K
TGCS-3LVP-006A07A	Warm White	18W	PG1C-6A30-AW	30°	2700		19.2	22.8	25.8	2700~4100K

RGB IN 1 Triple Module

Part Number	Color	Power Description	Lumens		Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
			Min.	Typ.		Min.	Typ.	Max.		
TP6M-1LFP-3SC	Red	3W RGB in 1	30.6	40.0	150mA	5.7	6.6	9.3	613.5~631nm	Lambertian 2θ½=140°
	Green		58.9	66.0		8.4	10.5	12.9	515~535nm	
	Blue		10.7	14.0		8.4	10.5	12.9	455~475nm	
TL6M-3LFP-3SC	Red	9W RGB in 1	70.5	102.0	350mA	5.7	6.6	9.3	613.5~631nm	
	Green		119.4	174.0		8.4	10.5	12.9	515~535nm	
	Blue		24.6	42.0		8.4	10.5	12.9	455~475nm	

Linear Module

Number of LED	Color	Power Description	Lumens		Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
			Min.	Typ.		Min.	Typ.	Max.		
18	White	9W	325.0	522.0	900mA	8.4	10.5	12.0	4100~10000K	Lambertian 2θ½=120°
18	Warm White	9W	325.0	486.0	900mA	8.4	10.5	12.0	2700~4100K	

High brightness LED

Butterfly series is single LED package providing the world highest brightness of 820 lumens (typical) to replace the conventional lighting.
For tight beam control, also available with highly efficient PMMA secondary optic. Available in cool white and warm white.

Butterfly module

TP6N-FN20

TP6N-FN25

Butterfly Module

Part Number	Color	Power Description	Lumens		Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
			Min.	Typ.		Min.	Typ.	Max.		
TF6M-10LWP-4SC	White	10W	450.0	550.0	700mA	11.2	14.0	17.2	4100~10000K	Lambertian 2θ½=120°
TF6M-10LVP-4SC	Warm White		430.0	520.0		11.2	14.0	17.2	2700~4100K	
TF6M-15LWP-6SC	White	15W	680.0	820.0		16.8	21.0	25.8	4100~10000K	
TF6M-15LVP-6SC	Warm White		650.0	780.0		16.8	21.0	25.8	2700~4100K	

TECTONIC LED CORP.

ISO 9001:2000 Products RoHs Compliance

Tri-color RGB in 1 series- LED family

Main Applications

Entertainment lighting

Interior and exterior full-color signs

Color changing mood lighting

Trab RGB in one LED

Part Number	Picture	Color	Power Description	Lumens		Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
				Min.	Typ.		Min.	Typ.	Max.		
TP6N-TFFE		Red	0.3W	0.75	1.5	20mA	1.8	2.2	2.5	613.5~631nm	Lambertian 2θ½=120°
		Green		1.7	3.4		2.8	3.2	3.4	515~535nm	
		Blue		0.5	1.0		2.8	3.1	3.4	455~475nm	
TP6N-FFFE		Red	0.5W	0.77	1.7	40mA	1.9	2.2	3.1	613.5~631nm	
		Green		2.2	4.25		2.8	3.5	4.0	515~535nm	
		Blue		0.4	0.85		2.8	3.5	4.0	455~475nm	
TP6N-1LFE		Red	1W	8.2	16.0	150mA	1.9	2.2	3.1	613.5~631nm	Lambertian 2θ½=140°
		Green		10.7	19.0		2.8	3.5	4.3	515~535nm	
		Blue		2.9	5.5		2.8	3.5	4.3	455~475nm	

Anole RGB in 1

Part Number	Picture	Color	Power Description	Lumens		Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
				Min.	Typ.		Min.	Typ.	Max.		
TG1N-1LFE		Red	1W	8.2	14.5	150mA	1.9	2.2	3.1	613.5~631nm	Lambertian 2θ½=140°
		Green		10.7	17.0		2.8	3.5	4.3	515~535nm	
		Blue		2.9	5.0		2.8	3.5	4.3	455~475nm	
TG1N-3LFE		Red	3W	23.5	34.0	350mA	1.9	2.2	3.1	613.5~631nm	
		Green		39.8	58.0		2.8	3.5	4.3	515~535nm	
		Blue		8.2	14.0		2.8	3.5	4.3	455~475nm	
TL6N-1LFE		Red	1W	8.2	14.5	150mA	1.9	2.2	3.1	613.5~631nm	
		Green		10.7	17.5		2.8	3.5	4.3	515~535nm	
		Blue		2.9	5.0		2.8	3.5	4.3	455~475nm	
TL6N-3LFE		Red	3W	23.5	34.0	350mA	1.9	2.2	3.1	613.5~631nm	
		Green		39.8	58.0		2.8	3.5	4.3	515~535nm	
		Blue		8.2	14.0		2.8	3.5	4.3	455~475nm	

Teceon RGB in 1

Part Number	Picture	Color	Power Description	Lumens		Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
				Min.	Typ.		Min.	Typ.	Max.		
TM6A-1LFE		Red	1W	10.7	16.0	150mA	1.9	2.5	3.1	613.5~631nm	Lambertian 2θ½=130°
		Green		10.7	19.0		2.8	3.7	4.3	515~535nm	
		Blue		2.9	5.5		2.8	3.7	4.3	455~475nm	
TM6A-3LFE		Red	3W	23.5	34.0	350mA	1.9	2.5	3.1	613.5~631nm	
		Green		39.8	55.0		2.8	3.7	4.3	515~535nm	
		Blue		8.2	14.0		2.8	3.7	4.3	455~475nm	

Butterfly RGB in 1

Part Number	Picture	Color	Power Description	Lumens		Test Current	Vf(V)			CCT or Wavelength	Radiation Pattern
				Min.	Typ.		Min.	Typ.	Max.		
TF6N-3LFE		Red	3W	23.5	34.0	350mA	1.9	2.5	3.1	613.5~631nm	Lambertian 2θ½=140°
		Green		39.8	52.0		2.8	3.7	4.3	515~535nm	
		Blue		8.2	14.0		2.8	3.7	4.3	455~475nm	
TF6N-9LFE		Red	9W	58.9	72.0	700mA	2.3	2.7	3.3	613.5~631nm	
		Green		76.6	95.0		3.3	4.0	4.3	515~535nm	
		Blue		18.1	24.0		3.3	4.0	4.3	455~475nm	