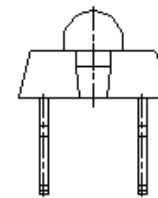
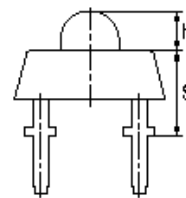
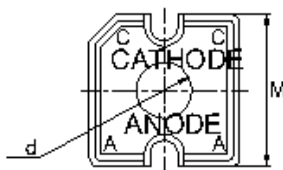


Standard 3mm Dome Piranha LED

Power Flash LED



RoHS



TCI Part No.	Chip			Lens Color	Flux (mlm)			V _F (v)			Viewing Angle 2θ1/2	Outline (mm)			
	Material	Emitted Color	λD(nm)		Min.	Typ.	at I _F =mA	Typ.	Max.	at I _F =mA		d	M	h	S
TLH-W1W3-30011B	InGaN	White	x=0.29 y=0.30	Water Clear	520	780	20	3.6	4.0	20	50°	3.0	7.62	1.50	4.40
TLH-W1W3-3001-PR			x=0.30 y=0.29	Water Clear	2850	4500	30	3.6	4.0	30	60°	3.0	7.62	1.50	4.40
TLH-W1W3-3001S463			x=0.30 y=0.31	Water Clear	715	4500	20	2.6	3.8	20	60°	3.0	7.62	1.50	4.40
TLH-W1W3-3101-PR			---	Water Clear	2850	---	30	3.6	---	30	45°	3.0	7.62	1.90	4.40
TLH-W1W3-3301-PR			---	Water Clear	2850	---	30	3.6	---	30	75°	3.0	7.62	1.35	4.40
TLH-W1W3-ZAEG			x=0.31 y=0.32	Water Clear	3850	6000	50	4.0	4.6	50	60°	3.0	7.62	1.90	4.40
TLH-W1W3-ZBEG	InGaN	Warm White	x=0.41 y=0.39	Water Clear	3850	6000	50	4.0	4.6	50	40°	3.0	7.62	2.10	4.40
TLH-M1W3-ZAEG				Water Clear	6000	7600	50	3.4	3.8	50	60°	3.0	7.62	1.90	4.40
TLH-M1W3-ZBEG	InGaN	Warm White	x=0.41 y=0.39	Water Clear	3850	6000	50	4.0	4.6	50	40°	3.0	7.62	2.10	4.40
TLN-B1W3-3001				Water Clear	3850	6000	50	4.0	4.6	50	40°	3.0	7.62	2.10	4.40
TLN-B1W3-3001	GaN	Super Blue	470	Water Clear	250	400	20	3.5	4.0	20	60°	3.0	7.62	1.50	4.40
TLH-B1W3-3001-KN	InGaN	Super Blue	470	Water Clear	1125	1800	30	3.5	4.0	30	80°	3.0	7.62	1.50	4.40
TLH-B1W3-3101-KN				Water Clear	1125	---	30	3.5	---	30	50°	3.0	7.62	1.90	4.40
TLH-B1W3-3301-KN				Water Clear	1125	---	30	3.5	---	30	90°	3.0	7.62	1.35	4.40
TLH-B1W3-3601-KN				Water Clear	1125	---	30	---	---	30	20°	3.0	7.62	2.10	4.40
TLH-B1W3-ZAEG				Water Clear	1000	1600	50	4.0	4.6	50	60°	3.0	7.62	1.50	4.55
TLH-B1W3-ZAGG				Water Clear	720	1000	50	4.2	4.8	50	60°	3.0	7.62	1.35	4.40
TLH-B1W3-ZBEG				Water Clear	1000	1600	50	4.0	4.6	50	40°	3.0	7.62	1.90	4.55
TLH-B1W3-ZBGG				Water Clear	720	1000	50	4.2	4.8	50	40°	3.0	7.62	1.90	4.40
TLH-B1W3-ZTEG				Water Clear	1000	1600	50	4.0	4.6	50	90°	3.0	7.62	1.35	4.40
TLH-B1W3-ZTGG				Water Clear	1000	1600	50	4.0	4.6	50	90°	3.0	7.62	1.35	4.40
TLN-T1W3-3001				Water Clear	720	1000	50	4.2	4.8	50	90°	3.0	7.62	1.35	4.40
TLN-T1W3-3001	GaN	True Green	525	Water Clear	250	400	20	3.5	4.0	20	60°	3.0	7.62	1.50	4.40
TLN-T1W3-3101				Water Clear	250	400	20	3.5	4.0	20	30°	3.0	7.62	1.90	4.40
TLH-T1W3-3001-RT	InGaN	True Green	525	Water Clear	4500	6000	30	3.5	4.0	30	80°	3.0	7.62	1.50	4.40
TLH-T1W3-3101-RT				Water Clear	4500	---	30	3.5	---	30	50°	3.0	7.62	1.90	4.40
TLH-T1W3-3301-RT				Water Clear	4500	---	30	3.5	---	30	90°	3.0	7.62	1.35	4.40
TLH-T1W3-ZAEG				Water Clear	2750	4500	50	4.0	4.6	50	60°	3.0	7.62	1.90	4.40
TLH-T1W3-ZAGG				Water Clear	2000	2750	50	4.2	4.8	50	60°	3.0	7.62	1.35	4.40
TLH-T1W3-ZBEG				Water Clear	2750	4500	50	4.0	4.6	50	40°	3.0	7.62	1.90	4.55
TLH-T1W3-ZBGG				Water Clear	2000	2750	50	4.0	4.6	50	40°	3.0	7.62	1.90	4.40
TLH-T1W3-ZTEG				Water Clear	2750	4500	50	4.0	4.6	50	90°	3.0	7.62	1.35	4.40
TLH-T1W3-ZTGG				Water Clear	2000	2750	50	4.2	4.8	50	90°	3.0	7.62	1.35	4.40
TLH-X1W3-3001				Water Clear	500	1310	70	2.3	2.9	70	70°	3.0	7.62	1.50	4.40
TLH-X1W3-3001-RT				Water Clear	4500	6750	70	2.6	3.1	70	85°	3.0	7.62	1.50	4.40
TLH-X1W3-3101-RT				Water Clear	4500	---	70	2.9	---	70	50°	3.0	7.62	1.90	4.40
TLH-X1W3-3301-RT				Water Clear	4500	---	70	2.6	---	70	100°	3.0	7.62	1.35	4.40
TLH-X1W3-3601-RT				Water Clear	4500	---	70	2.9	---	70	20°	3.0	7.62	2.10	4.40
TLH-X1W3-ZADG	AlInGaP	Super Yellow	589	Water Clear	1000	1700	70	2.4	3.0	70	60°	3.0	7.62	1.90	4.40
TLH-X1W3-ZBDG				Water Clear	1000	1700	70	2.3	2.6	70	40°	3.0	7.62	1.90	4.40
TLH-X1W3-ZBKK				Water Clear	3850	6000	70	2.4	3.0	70	40°	3.0	7.62	1.90	4.40
TLH-X1W3-ZCKK				Water Clear	3850	6000	70	2.4	3.0	70	30°	3.0	7.62	2.10	4.40
TLH-X1W3-ZIKK				Water Clear	3850	6000	70	2.4	3.0	70	70°	3.0	7.62	1.90	4.40
TLH-X1W3-ZTDG				Water Clear	3850	6000	70	2.4	3.0	70	70°	3.0	7.62	1.90	4.40
TLH-X1W3-ZTKK				Water Clear	1000	1700	70	2.3	2.6	70	90°	3.0	7.62	1.35	4.40
TLH-X1W3-ZTKK				Water Clear	3850	6000	70	2.4	3.0	70	90°	3.0	7.62	1.50	4.40

TLH-J1W3-3001	AlInGaP	Sunset Orange	615	Water Clear	500	1310	70	2.3	2.9	70	70°	3.0	7.62	1.50	4.40
TLH-J1W3-3001-B9				Water Clear	2250	---	70	2.4	---	70	70°	3.0	7.62	1.50	4.40
TLH-J1W3-3001-SU				Water Clear	5650	---	70	---	3.1	70	85°	3.0	7.62	1.50	4.40
TLH-J1W3-3001-X				Water Clear	1440	---	70	2.3	2.9	70	70°	3.0	7.62	1.50	4.40
TLH-J1W3-3101-SU				Water Clear	5650	---	70	2.6	---	70	50°	3.0	7.62	1.90	4.40
TLH-J1W3-3301-SU				Water Clear	5650	---	70	2.6	---	70	100°	3.0	7.62	1.35	4.40
TLH-J1W3-3601-RT				Water Clear	5650	---	70	---	---	70	20°	3.0	7.62	2.10	4.40

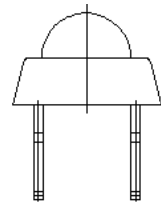
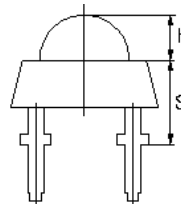
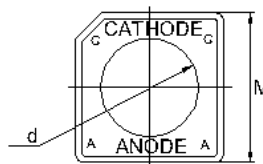
TCI Part No.	Chip			Lens Color	Flux (mIm)			V _F (v)			Viewing Angle 2θ1/2	Outline (mm)			
	Material	Emitted Color	λ _D (nm)		Min.	Typ.	at I _F =mA	Typ.	Max.	at I _F =mA		d	M	h	S
TLH-Q1W3-3001	AlInGaP	Super Red	624	Water Clear	500	1310	70	2.3	2.9	70	70°	3.0	7.62	1.50	4.40
TLH-Q1W3-3001-QS				Water Clear	3600	4500	70	2.6	3.1	70	85°	3.0	7.62	1.50	4.40
TLH-Q1W3-3101				Water Clear	500	1310	70	2.3	2.9	70	50°	3.0	7.62	1.90	4.40
TLH-Q1W3-3101-RT				Water Clear	4500	---	70	2.9	---	70	50°	3.0	7.62	1.90	4.40
TLH-Q1W3-3301-RT				Water Clear	3600	---	70	2.6	---	70	100°	3.0	7.62	1.35	4.40
TLH-Q1W3-3601-RT				Water Clear	4500	---	70	2.9	---	70	20°	3.0	7.62	2.10	4.40
TLH-Q1W3-ZADG				Water Clear	1000	1700	70	2.3	2.6	70	60°	3.0	7.62	1.90	4.40
TLH-Q1W3-ZBDG				Water Clear	1000	1700	70	2.3	2.6	70	40°	3.0	7.62	1.90	4.40
TLH-Q1W3-ZBKK				Water Clear	3850	5500	70	2.4	3.0	70	40°	3.0	7.62	1.90	4.40
TLH-Q1W3-ZCKK				Water Clear	3850	5500	70	2.4	3.0	70	30°	3.0	7.62	1.90	4.40
TLH-Q1W3-ZIKK				Water Clear	3850	5500	70	2.4	3.0	70	70°	3.0	7.62	1.90	4.40
TLH-Q1W3-ZTDG				Water Clear	1000	1700	70	2.3	2.6	70	90°	3.0	7.62	1.35	4.40
TLH-Q1W3-ZTKK				Water Clear	3850	5500	70	2.4	3.0	70	90°	3.0	7.62	1.50	4.40

Standard 5mm Dome Piranha LED

Power Flash LED



RoHS



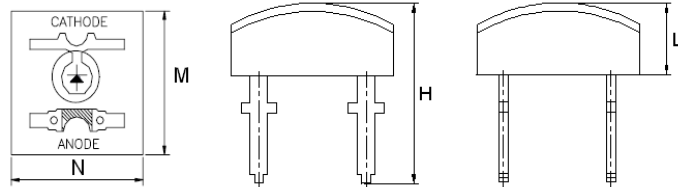
TCI Part No.	Chip			Lens Color	Flux (mIm)			V _F (v)			Viewing Angle 2θ1/2	Outline (mm)			
	Material	Emitted Color	λ _D (nm)		Min.	Typ.	at I _F =mA	Typ.	Max.	at I _F =mA		d	M	h	S
TLH-W1W5-3401-PR	InGaN	White	x=0.30 y=0.29	Water Clear	2850	4000	30	3.6	4.0	30	65°	5.00	7.62	2.50	4.80
TLH-W1W5-FAEG			x=0.31 y=0.32	Water Clear	3850	5500	50	4.0	4.6	50	60°	5.00	7.62	2.50	4.80
TLH-W1W5-FCEG				Water Clear	3850	5500	50	4.0	4.6	50	30°	4.55	7.62	3.30	4.80
TLH-M1W5-FAEG	InGaN	Warm White	x=0.41 y=0.39	Water Clear	6000	7600	50	3.4	3.8	50	60°	5.00	7.62	2.50	4.80
TLH-M1W5-FCEG				Water Clear	3850	5500	50	4.0	4.6	50	30°	4.55	7.62	3.30	4.80
TLH-B1W5-3401-KN	InGaN	Super Blue	470	Water Clear	1125	1800	30	3.5	4.0	30	70°	5.00	7.62	2.50	4.80
TLH-B1W5-3501-KN				Water Clear	1125	---	30	---	---	30	25°	4.50	7.62	3.40	4.80
TLH-X1W5-3401-RT	AlInGaP	Super Yellow	589	Water Clear	4500	6600	70	2.6	3.1	70	90°	5.00	7.62	2.50	4.80
TLH-X1W5-3501-RT				Water Clear	4500	6000	70	2.8	3.3	70	25°	5.00	7.62	3.40	4.80
TLH-X1W5-FBKK				Water Clear	3850	6000	70	2.4	3.0	70	40°	5.00	7.62	2.50	4.80
TLH-X1W5-FIKK				Water Clear	3850	6000	70	2.4	3.0	70	70°	5.00	7.62	2.50	4.80
TLH-X1W5-FSKK				Water Clear	3850	6000	70	2.4	3.0	70	100°	5.00	7.62	2.50	4.80
TLH-J1W5-3401-SU	AlInGaP	Sunset Orange	615	Water Clear	4500	7000	70	2.6	3.1	70	90°	5.00	7.62	2.50	4.80
TLH-J1W5-3501-RT				Water Clear	4500	---	70	2.6	---	70	25°	5.00	7.62	3.40	4.80
TLH-J1W5-3501-SU				Water Clear	5650	---	70	---	---	70	25°	5.00	7.62	3.40	4.80
TLH-Q1W5-3401-RT	AlInGaP	Super Red	624	Water Clear	3600	4500	70	2.6	3.1	70	95°	5.00	7.62	2.50	4.80
TLH-Q1W5-3501-RT				Water Clear	4500	6000	70	2.8	3.3	70	25°	5.00	7.62	3.40	4.80
TLH-Q1W5-FBKK				Water Clear	3850	5500	70	2.4	3.0	70	40°	5.00	7.62	2.50	4.80
TLH-Q1W5-FIKK				Water Clear	3850	5500	70	2.4	3.0	70	70°	5.00	7.62	2.50	4.80
TLH-Q1W5-FSKK				Water Clear	3850	5500	70	2.4	3.0	70	100°	5.00	7.62	2.50	4.80

Flat Curved Piranha LED

Power Flash LED



RoHS



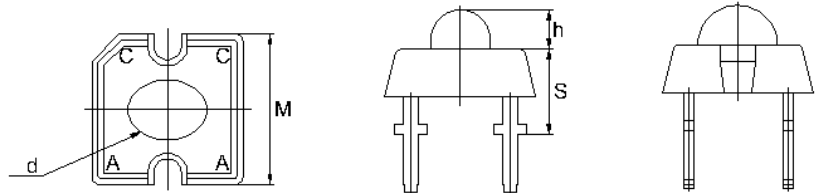
TCI Part No.	Chip			Lens Color	Flux (mIm)			V _F (v)			Viewing Angle 2θ1/2	Outline (mm)			
	Material	Emitted Color	λD(nm)		Min.	Typ.	at I _F =mA	Typ.	Max.	at I _F =mA		M	N	L	H
TLH-W1WC-ZMEG	InGaP	White	x=0.31 y=0.32	Water Clear	3850	5500	50	4.0	4.6	50	120°	7.62	7.62	3.50	8.50
TLH-M1WC-ZMEG	InGaP	Warm White	x=0.41 y=0.39	Water Clear	6000	7600	50	3.4	3.8	50	120°	7.62	7.62	3.50	8.50
TLH-B1WC-ZMEG	InGaP	Super Blue	470	Water Clear	1000	1300	50	4.0	4.6	50	140°	7.62	7.62	3.50	8.50
TLH-T1WC-ZMEG	InGaP	True Green	525	Water Clear	2750	3600	50	4.0	4.6	50	140°	7.62	7.62	3.50	8.50
TLH-X1WC-ZMKK	AlInGaP	Super Yellow	589	Water Clear	3850	5600	70	2.4	3.0	70	140°	7.62	7.62	3.50	8.50
TLH-Q1WC-ZMKK	AlInGaP	Super Red	624	Water Clear	3850	5400	70	2.4	3.0	70	140°	7.62	7.62	3.50	8.50

Oval Piranha LED

Power Flash LED



RoHS



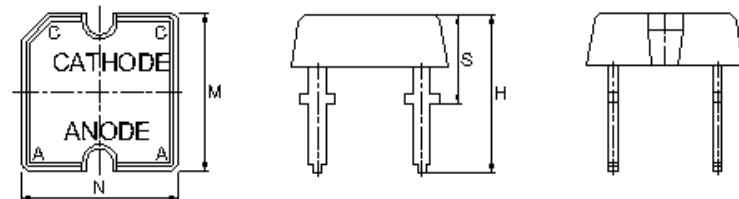
TCI Part No.	Chip			Lens Color	Flux (mIm)			V _F (v)			Viewing Angle 2θ1/2	Outline (mm)			
	Material	Emitted Color	λD(nm)		Min.	Typ.	at I _F =mA	Typ.	Max.	at I _F =mA		d	M	h	S
TLH-X1WV-3701-RT	AlInGaP	Super Yellow	589	Water Clear	4500	---	70	2.4	3.1	70	38°/85°	3.1x4	7.62	2.15	4.40
TLH-X1WV-ZVKK				Water Clear	3850	6000	70	2.4	3.0	70	25°/68°	3.0x4	7.62	2.10	4.40
TLH-J1WV-3701-RT	AlInGaP	Sunset Orange	615	Water Clear	4500	---	70	2.4	3.1	70	38°/85°	3.1x4	7.62	2.15	4.40
TLH-Q1WV-3701-RT	AlInGaP	Super Red	624	Water Clear	4500	---	70	2.4	3.1	70	38°/85°	3.1x4	7.62	2.15	4.40
TLH-Q1WV-ZVKK				Water Clear	3850	5500	70	2.4	3.0	70	25°/68°	3.0x4	7.62	2.10	4.40

Flat Top Piranha LED

Power Flash LED



RoHS



TCI Part No.	Chip			Lens Color	Flux (mlm)			V _F (v)			Viewing Angle 2θ _{1/2}	Outline (mm)			
	Material	Emitted Color	λ _D (nm)		Min.	Typ.	at I _F = mA	Typ.	Max.	at I _F = mA		M	N	S	H
TLH-W1WF-3201-PR	InGaN	White	---	Water Clear	2850	3500	30	3.6	4.0	30	130°	7.62	7.62	4.60	7.50
TLH-B1WF-3201-JM	InGaN	Super Blue	470	Water Clear	900	1425	30	3.5	4.0	30	130°	7.62	7.62	4.60	7.50
TLH-T1WF-3201-QS	InGaN	True Green	525	Water Clear	3600	4500	30	3.5	4.0	30	130°	7.62	7.62	4.60	7.50
TLH-X1WF-3201-QS	AlInGaP	Super Yellow	589	Water Clear	3600	---	70	---	---	70	135°	7.62	7.62	4.60	7.50
TLH-J1WF-3201-RT	AlInGaP	Sunset Orange	615	Water Clear	4500	---	70	2.6	3.1	70	135°	7.62	7.62	4.60	7.50
TLH-Q1WF-3201-QS	AlInGaP	Super Red	624	Water Clear	3600	4000	70	2.6	3.1	70	130°	7.62	7.62	4.60	7.50