

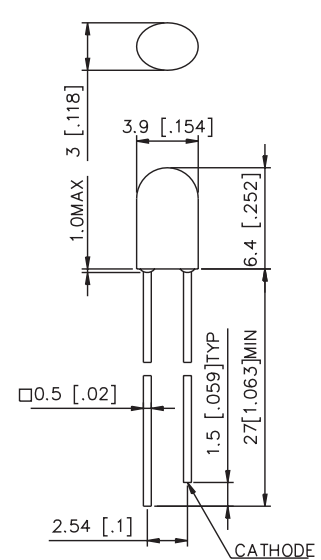
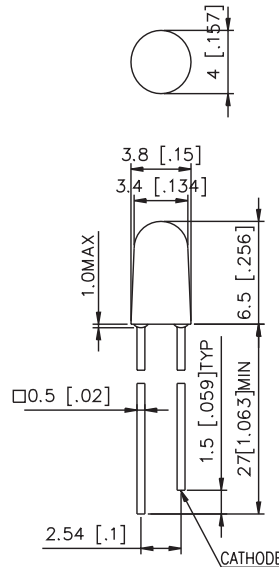
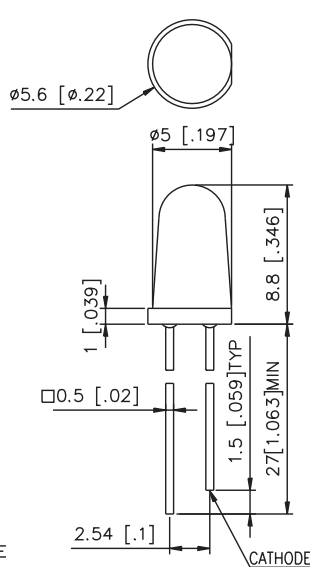
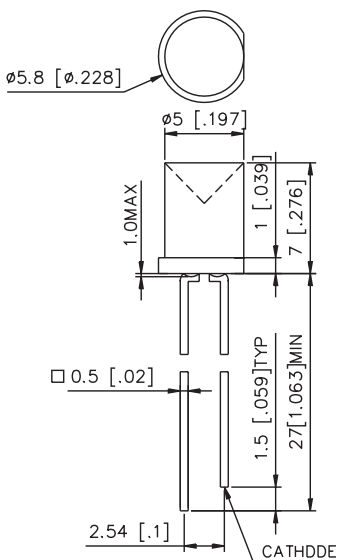
Type	Part No.	Chip			Lens Color	Vf(V)		Iv(mcd) at If=20mA		View Angle 2θ1/2	Figure No.
		Material	Emitting Color	λp(nm)		Typ.	Max.	Min.	Max.		
3mm Cylindrical	314HD	GaP	Red	700	Color Diff.	2.1	2.8	0.5	3.2	100	Fig.15
	314VD	GaAsP/GaP	Red	660	Color Diff.	2.1	2.8	10	50	100	
	314GD	GaP	Green	565	Color Diff.	2.1	2.8	1.3	8	100	
	314YD	GaAsP/GaP	Yellow	590	Color Diff.	2.0	2.8	1.3	8	100	
3mm Cylindrical	324VT	GaAsP/GaP	Red	660	Red Transparent	2.1	2.8	3.2	12.5	130	Fig.16
	324VCL	GaAsP/GaP	Red	660	Water Clear	2.1	2.8	3.2	12.5	130	
	324GT	GaP	Green	565	Green Transparent	2.1	2.8	2	8	130	
	324GC	GaP	Green	565	Water Clear	2.1	2.8	2	8	130	
	324YT	GaAsP/GaP	Yellow	590	Yellow Transparent	2.0	2.8	2	8	130	
	324YD	GaAsP/GaP	Yellow	590	Water Clear	2.0	2.8	2	8	130	
5mm Cylindrical	524VT	GaAsP/GaP	Red	660	Red Transparent	2.1	2.8	3.2	12.5	140	Fig.17
	524VCL	GaAsP/GaP	Red	660	Water Clear	2.1	2.8	3.2	12.5	140	
	524GT	GaP	Green	565	Green Transparent	2.1	2.8	2	8	140	
	524GC	GaP	Green	565	Water Clear	2.1	2.8	2	8	140	
	524YT	GaAsP/GaP	Yellow	590	Yellow Transparent	2.0	2.8	2	8	140	
	524YD	GaAsP/GaP	Yellow	590	Water Clear	2.0	2.8	2	8	140	
5mm Coniform	533BT	GaN	Blue	460~475	Blue Transparent	3.2	4.5	1500	2000	15	Fig.18
	533PGT	GaN	Pure green	500~510	Green Transparent	3.6	4.5	8000	10000	15	
	533GT	GaP	Yellow green	520~535	Green Transparent	3.5	4.5	6000	8000	15	
	533YT	GaP	Yellow	567~573	Yellow Transparent	2.2	2.6	350	500	15	
	533OD	GaAsP/GaP	Orange	584~594	Color Diff.	1.9	2.4	6000	8000	15	
	533VDL	AlGaInP	Red	603~619	Color Diff.	1.9	2.4	6000	8000	15	
	533VDH	AlGaInP	Red	620~635	Color Diff.	1.9	2.4	4000	6000	15	
3.8x4.0 Elliptical	413BT	GaN	Blue	460~475	Blue Transparent	3.2	4.5	250	350	120	Fig.19
	413PGT	GaN	Pure green	520~535	Green Transparent	3.5	4.5	600	800	120	
	413GT	GaP	Yellow green	567~573	Green Transparent	2.2	2.6	60	80	120	
	413YT	GaP	Yellow	584~594	Yellow Transparent	1.9	2.4	300	400	120	
	413OD	GaAsP/GaP	Orange	603~619	Color Diff.	2.0	2.5	300	400	120	
	413VD	AlGaInP	Red	620~635	Color Diff.	1.9	2.2	150	200	120	

Fig. 17

Fig. 18

Fig. 19

Fig. 20



Type	Part No.	Chip			Lens Color	Vf(V)		Iv(mcd) at If=20mA		View Angle 2θ/2	Figure No.
		Material	Emitting Color	λp(nm)		Typ.	Max.	Min.	Max.		
3.0x3.9 Elliptical	393BT	GaN	Blue	460~475	Blue Transparent	3.2	4.5	300	400	110	Fig.20
	393PGT	GaN	Pure green	520~535	Green Transparent	3.5	4.5	1000	1200	110	
	393YT	GaP	Yellow	584~595	Yellow Transparent	1.9	2.4	450	600	110	
	393OD	GaAsP/GaP	Orange	603~619	Color Diff.	2.0	2.5	300	400	110	
	393VD	AlGaInP	Red	620~635	Color Diff.	1.9	2.4	250	350	110	
3.2x4.3 Elliptical	433BT	GaN	Blue	460~475	Blue Transparent	3.2	4.5	250	350	120	Fig.21
	433PGT	GaN	Pure green	520~535	Green Transparent	3.5	4.5	600	800	120	
	433GT	GaP	Yellow green	567~573	Green Transparent	2.2	2.6	60	80	120	
	433YT	GaP	Yellow	584~594	Yellow Transparent	1.9	2.4	300	400	120	
	433OD	GaAsP/GaP	Orange	603~619	Color Diff.	2.0	2.5	300	400	120	
	433VD	AlGaInP	Red	620~635	Color Diff.	1.9	2.2	150	200	120	
3.8x5.2 Elliptical	383BT	GaN	Blue	460~475	Blue Transparent	3.2	4.5	300	400	110	Fig.22
	383PGT	GaN	Pure green	520~535	Green Transparent	3.5	4.5	1000	1200	110	
	383GT	GaP	Yellow green	567~573	Green Transparent	2.2	2.6	70	90	110	
	383YT	GaP	Yellow	584~595	Yellow Transparent	1.9	2.4	450	600	110	
	383OD	GaAsP/GaP	Orange	603~619	Color Diff.	2.0	2.5	300	400	110	
	383VDL	AlGaInP	Red	620~635	Color Diff.	1.9	2.4	150	200	110	
	383VDH	AlGaInP	Red	620~635	Color Diff.	1.9	2.4	380	500	110	
4.2x5.0 Elliptical	513BT	GaN	Blue	460~475	Blue Transparent	3.2	4.5	500	700	70	Fig.23
	513PGT	GaN	Pure green	520~535	Green Transparent	3.2	4.5	1500	2000	70	
	513GT	GaP	Yellow green	567~573	Green Transparent	1.9	2.5	120	150	70	
	513YT	GaP	Yellow	584~595	Yellow Transparent	1.9	2.4	600	800	70	
	513VDL	AlGaInP	Red	620~635	Color Diff.	1.9	2.4	450	600	70	
	513VDH	AlGaInP	Red	620~635	Color Diff.	1.9	2.4	700	1000	70	
5.8x4.6 Elliptical	583BT	GaN	Blue	460~475	Blue Transparent	3.2	4.5	460	600	70	Fig.24
	583PGT	GaN	Pure green	520~535	Green Transparent	3.5	4.5	1600	2000	70	
	583GT	GaP	Yellow green	567~573	Green Transparent	2.2	2.6	120	150	70	
	583YT	GaP	Yellow	584~595	Yellow Transparent	1.9	2.4	600	800	70	
	583VDL	AlGaInP	Red	603~619	Color Diff.	2.0	2.5	600	800	70	
	583VDH	AlGaInP	Red	620~635	Color Diff.	1.9	2.4	700	900	70	

Fig. 21

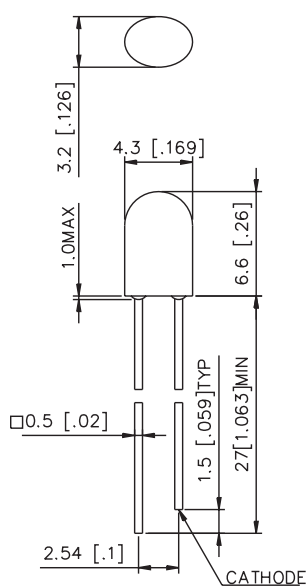


Fig. 22

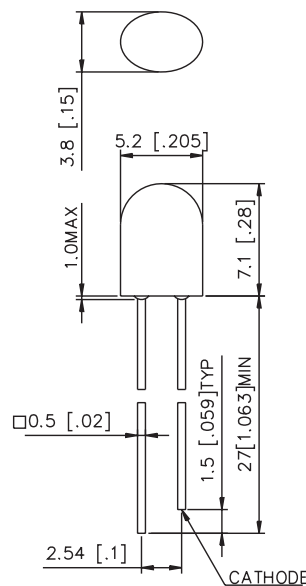


Fig. 23

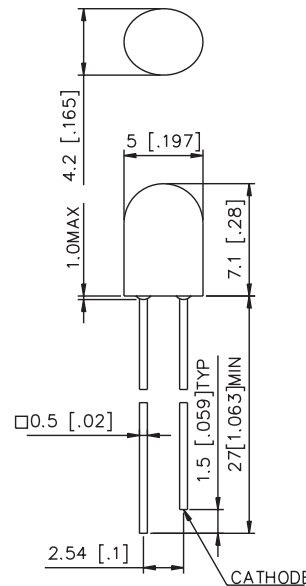
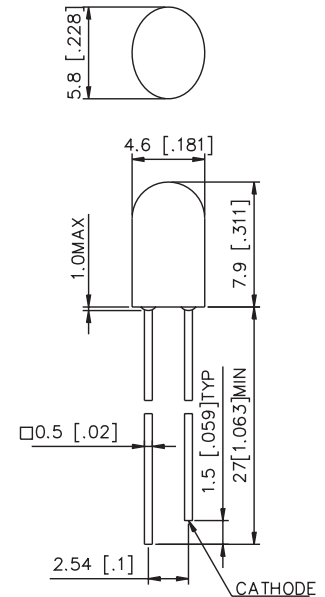


Fig. 24



Type	Part No.	Chip			Lens Color	Vf(V)		Iv(mcd) at If=20mA		View Angle 201/2	Figure No.
		Material	Emitting Color	$\lambda_p$ (nm)		Typ.	Max.	Min.	Max.		
5mm Round Blinking Single-color	503HDBL	GaP	Red	700	Color Diff.	2.1	2.8	1.3	3.2	30	Fig.25
	503VDBL	GaAsP/GaP	Red	660	Color Diff.	2.1	2.8	20	120	30	
	503VCLBL	GaAsP/GaP	Red	660	Water Clear	2.1	2.8	200	380	20	
	503GDBL	GaP	Green	565	Color Diff.	2.1	2.8	5	20	30	
	503GCBL	GaP	Green	565	Water Clear	2.1	2.8	20	90	20	
	503YDBL	GaAsP/GaP	Yellow	590	Color Diff.	2.0	2.8	5	20	30	
	503YCBL	GaAsP/GaP	Yellow	590	Water Clear	2.0	2.8	10	80	20	
5mm Round Blinking Bi-color	503RB-F	GaAsP	Red	635	Water Clear	2.1	2.8	800	1500	20	
		GaN	Blue	465		3.0	3.5	1500	3000		
		(IC)	R B	/		3.5	4.5	/	/		
5mm Round Blinking Full-color	503RPG-B-F Fast Blinking	GaAsP	Red	635	Water Clear	2.1	2.8	800	1500	20	
		AlGaInP	Pure Green	520		3.0	3.5	2500	4500		
		GaN	Blue	465		3.0	3.5	1500	3000		
	503RPG-B-S Slow Blinking	GaAsP	Red	635	Water Clear	2.1	2.8	800	1500	20	
		AlGaInP	Pure Green	520		3.0	3.5	2500	4500		
		GaN	Blue	465		3.0	3.5	1500	3000		
(IC)	R PG B	/	3.5	4.5	/	/					
8mm Round Blinking Single-color	803VDBL	GaAsP/GaP	Red	660	Color Diff.	2.1	2.8	20	100	60	Fig.26
	803VCLBL	GaAsP/GaP	Red	660	Water Clear	2.1	2.8	50	250	50	
	803GDBL	GaP	Green	565	Color Diff.	2.1	2.8	20	70	60	
	803GCBL	GaP	Green	565	Water Clear	2.1	2.8	50	175	50	
	803YDBL	GaAsP/GaP	Yellow	590	Color Diff.	2.0	2.8	20	70	60	
	803YCBL	GaAsP/GaP	Yellow	590	Water Clear	2.0	2.8	50	175	50	
10mm Round Blinking Single-color	1003VDBL	GaAsP/GaP	Red	660	Color Diff.	2.1	2.8	20	100	60	Fig.27
	1003VCLBL	GaAsP/GaP	Red	660	Water Clear	2.1	2.8	50	250	50	
	1003GDBL	GaP	Green	565	Color Diff.	2.1	2.8	20	70	60	
	1003GCBL	GaP	Green	565	Water Clear	2.1	2.8	50	250	50	
	1003YDBL	GaAsP/GaP	Yellow	590	Color Diff.	2.0	2.8	20	70	60	
	1003YCBL	GaAsP/GaP	Yellow	590	Water Clear	2.0	2.8	50	250	50	

Fig. 25

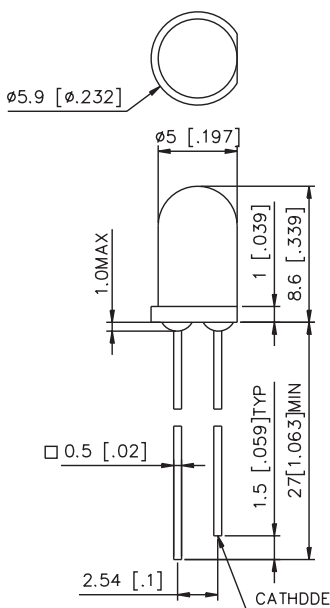


Fig. 26

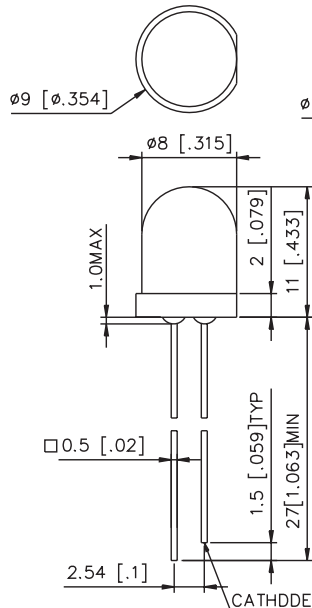


Fig. 27

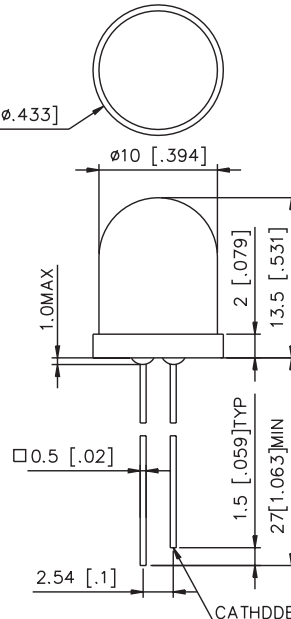
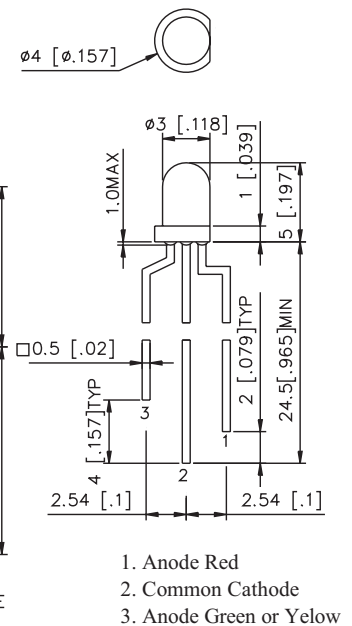


Fig. 28



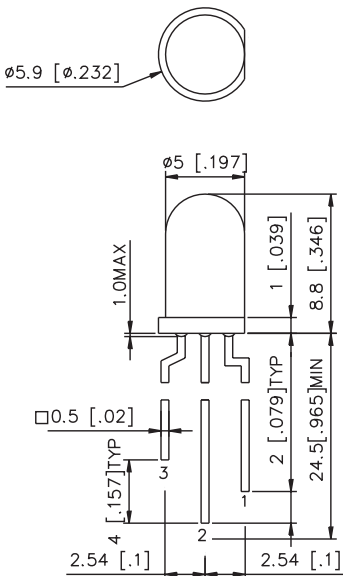
Type	Part No.	Chip			Lens Color	Vf(V)		Iv(mcd) at If=20mA		View Angle 2θ1/2	Figure No.
		Material	Emitting Color	λp(nm)		Typ.	Max.	Min.	Max.		
3mm Round Bi-Color & Bi-Polar	3RG9HW	GaAsP/GaP	Red	660	White Diff.	2.1	2.8	20	50	60	Fig.28
		GaP	Green	565		2.1	2.8	20	50		
	3RY9HW	GaAsP/GaP	Red	660	White Diff.	2.1	2.8	20	50	60	
		GaAsP/GaP	Yellow	590		2.1	2.8	20	50		
3GY9HW	3GY9HW	GaP	Green	565	White Diff.	2.1	2.8	20	50	60	
		GaAsP/GaP	Yellow	590		2.1	2.8	20	50		
5mm Round Bi-Color & Bi-Polar	5RG9HW	GaAsP/GaP	Red	660	White Diff.	2.1	2.8	20	90	60	Fig.29
		GaP	Green	565		2.1	2.8	20	70		
	5RY9HW	GaAsP/GaP	Red	660	White Diff.	2.1	2.8	20	90	60	
		GaAsP/GaP	Yellow	590		2.1	2.8	20	60		
5GY9HW	5GY9HW	GaP	Green	565	White Diff.	2.1	2.8	20	70	60	
		GaAsP/GaP	Yellow	590		2.1	2.8	20	60		
8mm Round Bi-Color & Bi-Polar	8RG9HW	GaAsP/GaP	Red	660	White Diff.	2.1	2.8	30	90	50	Fig.30
		GaP	Green	565		2.1	2.8	20	60		
	8RG9HC	GaAsP/GaP	Red	660	Water Clear	2.1	2.8	50	175	30	
		GaP	Green	565		2.1	2.8	50	100		
10mm Round Bi-Color & Bi-Polar	10RG9HW	GaAsP/GaP	Red	660	White Diff.	2.1	2.8	30	90	50	Fig.31
		GaP	Green	565		2.1	2.8	20	60		
	10RG9HC	GaAsP/GaP	Red	660	Water Clear	2.1	2.8	50	175	30	
		GaP	Green	565		2.1	2.8	50	100		
2x5 Bi-C & Bi-P	2RG9HW	GaAsP/GaP	Red	660	White Diff.	2.1	2.8	8	20	110	Fig.32
		GaP	Green	565		2.1	2.8	8	20		

Fig. 29

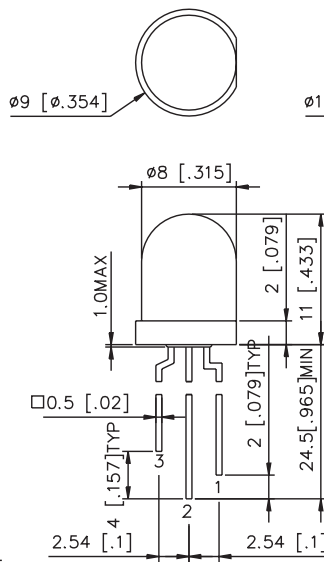
Fig. 30

Fig. 31

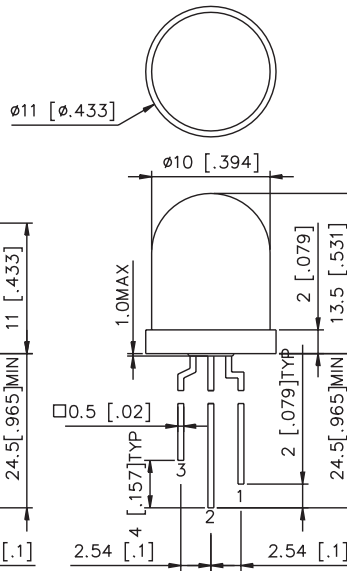
Fig. 32



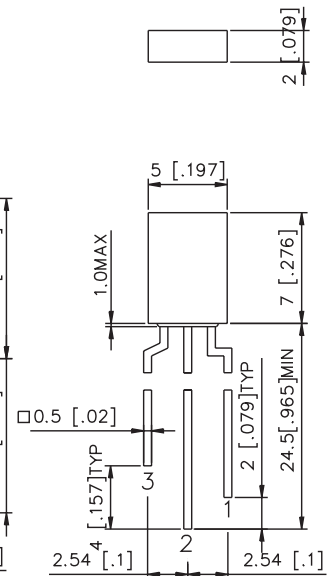
1. Anode Red
2. Common Cathode
3. Anode Green or Yellow



1. Anode Red
2. Common Cathode
3. Anode Green



1. Anode Red
2. Common Cathode
3. Anode Green



1. Anode Red
2. Common Cathode
3. Anode Green