



Unity Microelectronics, Inc.

High-Bright Visible LEDs

Unity Microelectronics is the USA-based sales and marketing division of Unity Opto Technology founded in Taipei, Taiwan. Unity has designed and manufactured optoelectronics devices since 1993, and today is a leader in high-bright visible LEDs and IR devices. The high-bright visible LED portfolio includes popular SMT and thru-hole packages utilizing AlInGaP and InGaN chip technology.



Features ▶

- Full range of colors
- Industry-standard packaging
- Tight binning
- Single- and multi-color options

Benefits ▶

- Meet wide range of LED needs
- High-volume manufacturing capacity
- Intensity and color uniformity
- RGB LEDs for full color
- Custom assembly capability

Applications ▶

- LCD backlight, automotive lighting, general illumination, gaming, signage, flashlight, and beacon lighting

Product Specifications ▶

Part Number	Package Type	Color	Color Temp. (°K)	Dominant Wavelength (nm)	Max. Current (mA)	Tested Current (mA)	Forward Voltage (V)	Viewing Angle (deg)	Luminous Flux (lm)	Luminous Intensity (mcd)	Markets
MPL-54M4SR	PowerLED-1W	Red	NA	625	550	350	2.5	140	40	NA	CL FL TR BL SI
MPL-54M4SA		Amber	NA	590	550	350	2.5	140	40	NA	CL FL TR BL SI
MPL-54M4SG		True green	NA	530	500	350	3.45	140	55	NA	CL FL TR BL SI
MPL-54M4SB		Blue	NA	465	500	350	3.45	140	20	NA	CL FL TR BL SI
MPL-54M4SW-55P		White	4,500-8,000	NA	500	350	3.45	140	45	NA	CL FL TR BL SI
MPL-54M4SW-55Q		White	4,500-8,000	NA	500	350	3.45	140	55	NA	CL FL TR BL SI
MPL-54M4SW-55R		White	4,500-8,000	NA	500	350	3.45	140	65	NA	CL FL TR BL SI
MPL-54M4SW-25N		Warm white	2,500-4,000	NA	500	350	3.45	140	35	NA	CL FL TR BL SI
MPL-54M4SW-25P		Warm white	2,500-4,000	NA	500	350	3.45	140	45	NA	CL FL TR BL SI
MPL-54M5SW-55T		PowerLED-3W	White	4,500-8,000	NA	1,000	700	3.9	140	100	NA
MPL-54M5SW-25S	Warm white		2,500-4,000	NA	1,000	700	3.9	140	80	NA	CL FL TR BL SI
MSL-209DCL-FUOL	PLCC-6 0.5W	Red	NA	625	200	150	2.7	120	10	NA	CL FL TR BL SI
MSL-209DCL-FSOL		Red orange	NA	615	200	150	2.7	120	14	NA	CL FL TR BL SI
MSL-209DCL-FUYL		Amber	NA	594	200	150	3.1	120	12	NA	CL FL TR BL SI
MSL-209HCL-STG		True green	NA	525	300	150	3.6	120	16	NA	CL FL TR BL SI
MSL-209HCL-SB		Blue	NA	470	300	150	3.6	120	5	NA	CL FL TR BL SI
MSL-209HWL-ST56		White	5,600	NA	300	150	3.6	120	20	NA	CL FL TR BL SI
MSL-209HWL-ST32		Warm white	3,200	NA	300	150	3.6	120	15	NA	CL FL TR BL SI
MSL-2099CC-HARGB		PLCC-RGB	RGB	NA	625/530/470	30/20/20	20/20/20	2.1/3.3/3.3	120	NA	160/480/100
MSL-609RGB-ELB	RGB		NA	625/535/470	35/35/35	20/20/20	2.2/3.4/3.3	110	NA	640/1,380/420	CL TR BL
MSL-617RGB-EL	PLCC-RGB 0.5W	RGB	NA	625/535/465	150/150/150	100/100/100	2.5/3.5/3.5	110	NA	3,100/5,000/1,400	CL FL TR BL SI
MSL-23(6)45CJ-AUOL	PLCC-4-domed	Red	NA	625	70	50	2.1	30 (60)	NA	4,200 (4,000)	CL TR BL SI
MSL-23(6)45CJ-SO		Orange	NA	605	70	50	2.1	30 (60)	NA	4,000 (3,000)	CL TR BL SI
MSL-23(6)45CJ-AUYL		Amber	NA	590	70	50	2.1	30 (60)	NA	4,200 (4,000)	CL TR BL SI
MSL-23(6)45CF-STG		True green	NA	527	30	30	3.8	30 (60)	NA	2,400 (2,000)	CL TR BL SI
MSL-23(6)45CF-SB		Blue	NA	472	30	30	3.8	30 (60)	NA	1,200 (1,000)	CL TR BL SI
MSL-23(6)45WF-ST65		White	6,500	NA	30	30	3.8	30 (60)	NA	2,200 (1,600)	CL TR BL SI
MSL-23(6)45WF-ST32		Warm white	3,200	NA	30	30	3.8	30 (60)	NA	2,600 (1,800)	CL TR BL SI
MVL-914AUOLC		JackLED	Red	NA	640	150	70	2.5	90	3.5	NA
MVL-914STGC	Green		NA	525	100	20	3.7	50	2.5	NA	CL TR SI
MVL-914SBC	Blue		NA	470	100	20	3.7	70	1.3	NA	CL TR SI
MVL-914SW	White		NA	(0.33/0.31)	100	20	3.7	60	1.3	NA	CL TR SI
MVL-974AUOLC	Red		NA	640	150	70	2.5	30	3.5	NA	CL TR SI
MVL-974STGC	Green		NA	525	100	20	3.7	25	2.5	NA	CL TR SI
MVL-974SBC	Blue		NA	470	100	20	3.7	25	1.3	NA	CL TR SI
MVL-974SW	White		NA	(0.31/0.32)	100	20	3.7	35	3.2	NA	CL TR SI

MARKETS LEGEND

CL COMMERCIAL LIGHTING FL FLASHLIGHTS TR TRANSPORTATION BL BACKLIGHTING SI SIGNAGE