



Opto Devices

LED Displays

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High Brightness LED Numeric Displays

High brightness, low power consumption, and high reliability.

High Brightness LED Numeric Displays																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings(Ta=25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics(Ta=25°C)									
			Power Dissipation P _o (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} * (mA)	Reverse Voltage V _R (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage V _F		Reverse Current I _R		Light Wavelength Peak Half-wave		Brightness/Digit I _v			
									Typ. (V)	I _F (mA)	Max. (μA)	V _R (V)	λ _p Typ. (nm)	Δλ Typ. (nm)	I _F (mA)	Min. (mcd)	Typ. (mcd)	I _F (mA)
Character Height:8mm External Dimensions:(7×11)	LAP-301VB/VL	Red													14	36		
	LAP-301MB/ML	Green	448	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	572	20	10	36	100	10
	LAP-301DB/DL	Orange														56	250	
Character Height:10.16mm External Dimensions:(9.6×13)	LAP-401VD/VN	Red													14	36		
	LAP-401MD/MN	Green	448	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	572	20	10	36	100	10
	LAP-401DD/DN	Orange														56	250	
Character Height:14.6mm External Dimensions:(12.5×19)	LAP-601VB/VL	Red													14	36		
	LAP-601MB/ML	Green	448	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	572	20	10	36	100	10
	LAP-601DB/DL	Orange														56	250	
Character Height:14.3mm External Dimensions:(25×19)	LBP-602VA2/VK2	Red													14	36		
	LBP-602MA2/MK2	Green	896	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	572	20	10	36	100	10
	LBP-602DA2/DK2	Orange														56	250	

Notes:*I_{FP} measured under duty ≤ 1/5, Pulse width ≤ 1ms

LED Numeric Displays

ROHM's LED numeric displays are compatible with automatic reflow processes.

Single Digit LED Numeric Displays(Surface Mount type)																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings(Ta=25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics(Ta=25°C)									
			Power Dissipation P _o (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} * (mA)	Reverse Voltage V _R (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage V _F		Reverse Current I _R		Light Wavelength Peak Half-wave		Brightness/Digit I _v			
									Typ. (V)	I _F (mA)	Max. (μA)	V _R (V)	λ _p Typ. (nm)	Δλ Typ. (nm)	I _F (mA)	Min. (mcd)	Typ. (mcd)	I _F (mA)
Character Height:8mm External Dimensions:(6.8×11)	LF-3011VA/VK	Red	320	15	60	5	-25 to +75	-30 to +85	2.0	10	100	3	650	40	10	3.6	10	10
	LF-3011MA/MK	Green	480	20					2.1				563					

Notes:*I_{FP} measured under duty ≤ 1/5, Pulse width ≤ 1ms

These single digit numeric displays are 8 to 25.4mm in height and available in a range of colors.

Single Digit LED Numeric Displays																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings(Ta=25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics(Ta=25°C)									
			Power Dissipation P _o (mW)	Forward Current I _F (mA)	Peak Forward Current I _{Fp} * (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)	Forward Voltage V _F		Reverse Current I _R		Light Wavelength Peak Half-wave		Brightness/Digit I _v			
								Typ. (V)	I _F (mA)	Max. (μA)	V _R (V)	λ _p Typ. (nm)	Δλ Typ. (nm)	I _F (mA)	Min. (mcd)	Typ. (mcd)	I _F (mA)	
	LA-301VB/VL	Red	320	15	60			2.0	10			650	40	10	3.6	10		
	LA-301MB/ML	Green	480	20														2.1
	LA-301AB/AL	High Brightness Red	520	25	50			2.05	20			626	18	20	36	90		
	LA-301EB/EL	High Brightness Orange																610
	LA-401VD/VN	Red	320	15	60			2.0	10			650	40	10	5.6	16		
	LA-401MD/MN	Green	480	20														2.1
	LA-401AD/AN	High Brightness Red	520	25	50			2.05	20			626	18	20	36	90		
	LA-401ED/EN	High Brightness Orange																610
	LA-501VD/VN	Red	480	20	60	5	-25 to +75	-30 to +85	2.0	10	100	3	650	40	10	5.6	16	10
	LA-501MD/MN	Green																
	LA-601VB/VL	Red	520	25	50				2.0	20			650	40	10	3.6	10	
	LA-601MB/ML	Green																2.1
	LA-601AB/AL	High Brightness Red											626	18	20	36	90	
	LA-601EB/EL	High Brightness Orange																610
	LA-101VA/VK	Red	640	15	60				4.0	10			650	40	10	3.6	10	
	LA-101MA/MK	Green																4.2

Notes: *I_{Fp} measured under duty ≤ 1/5, Pulse width ≤ 1ms, High Brightness and Blue I_F measured under duty ≤ 1/10, Pulse width ≤ 0.1 ms Notes2: LA-101 series : order-based production

These two digit numeric displays are 10.16 to 14.3mm in height and available in a range of colors.

Two Digit LED Numeric Displays																	
Shape	Part No.	Emitting Color	Absolute Maximum Ratings(Ta=25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics(Ta=25°C)								
			Power Dissipation P _o (mW)	Forward Current I _F (mA)	Peak Forward Current I _{Fp} * (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)	Forward Voltage V _F		Reverse Current I _R		Light Wavelength Peak Half-wave		Brightness/Digit I _v		
								Typ. (V)	I _F (mA)	Max. (μA)	V _R (V)	λ _p Typ. (nm)	Δλ Typ. (nm)	I _F (mA)	Min. (mcd)	Typ. (mcd)	I _F (mA)
	LB-402VD/VN	Red	640	15	60	5	-25 to +75	-30 to +85	2.0	10			650	40	10	5.6	16
	LB-402MD/MN	Green															
	LB-502VD/VN	Red	960	20	60	5	-25 to +75	-30 to +85	2.0	10	100	3	650	40	10	5.6	16
	LB-502MD/MN	Green															
	LB-602VA2/VK2	Red	960	20	60	5	-25 to +75	-30 to +85	2.0	10			650	40	10	5.6	16
	LB-602MA2/MK2	Green															
	LB-602AA2/AK2	High Brightness Red							626	18			20	36	90		
	LB-602EA2/EK2	High Brightness Orange														610	17

Notes: *I_{Fp} measured under duty ≤ 1/5, Pulse width ≤ 1ms, High Brightness and Blue I_F measured under duty ≤ 1/10, Pulse width ≤ 0.1 ms

Three Digit LED Numeric Display																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings(Ta=25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics(Ta=25°C)									
			Power Dissipation P _o (mW)	Forward Current I _F (mA)	Peak Forward Current I _{Fp} * (mA)	Reverse Voltage V _R (V)	Operating Temperature T _{opr} (°C)	Storage Temperature T _{stg} (°C)	Forward Voltage V _F		Reverse Current I _R		Light Wavelength Peak Half-wave		Brightness/Digit I _v			
								Typ. (V)	I _F (mA)	Max. (μA)	V _R (V)	λ _p Typ. (nm)	Δλ Typ. (nm)	I _F (mA)	Min. (mcd)	Typ. (mcd)	I _F (mA)	
	LB-603VF/VP	Red	960	15	60	5	-25 to +75	-30 to +85	2.0	10	100	3	650	40	10	5.6	16	10

Notes: *I_{Fp} measured under duty ≤ 1/5, Pulse width ≤ 1ms

