

## LED显示器

高亮度LED数字显示器

P.269

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P.270

表面贴装LED数字显示器

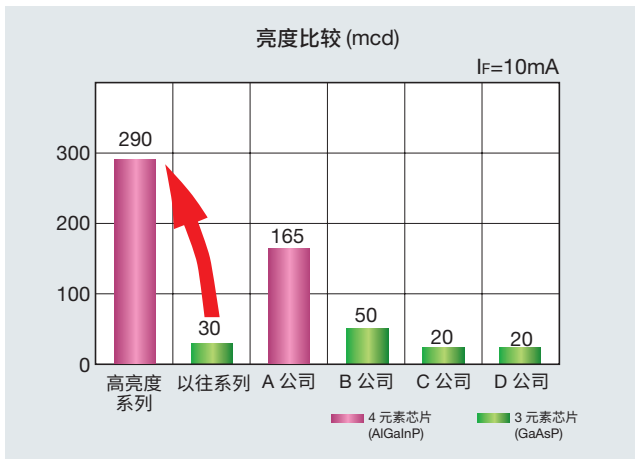
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## 高亮度LED数字显示器系列的特点

罗姆的高亮度LED数字显示器同时实现了高亮度和低功耗。

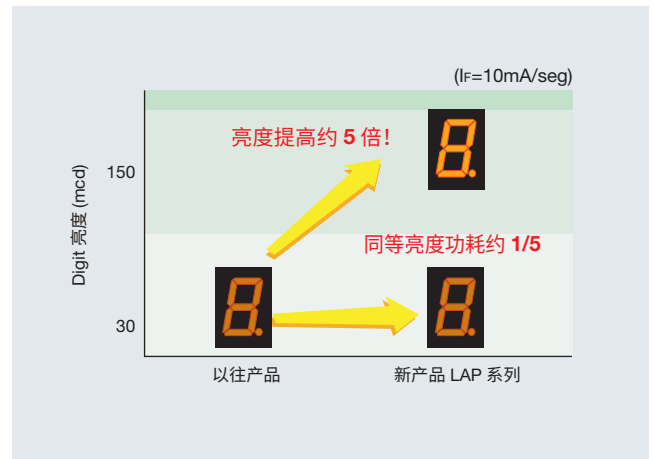
### ■ 高亮度

由于采用了4元素, 亮度是以往数字显示器的大约10倍。  
(橙色发光率)



### ■ 低功耗

电流是以往的1/5也能实现相同的亮度。为组件的省电做出贡献。



## 高亮度LED数字显示器

拥有高亮度、低功耗和高可靠性。

一位数LED数字显示器																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings (T <sub>s</sub> =25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics (T <sub>s</sub> =25°C)									
			Power Dissipation P <sub>o</sub> (mW)	Forward Current I <sub>F</sub> (mA)	Peak Forward Current I <sub>FP</sub> * (mA)	Reverse Voltage V <sub>R</sub> (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage V <sub>F</sub>		Reverse Current I <sub>R</sub>		Light Wavelength Peak Half-wave			Luminous Intensity/Digit I <sub>v</sub>		
								Typ (V)	I <sub>F</sub> (mA)	Max (μA)	V <sub>R</sub> (V)	λ <sub>p</sub> Typ (nm)	Δλ Typ (nm)	I <sub>F</sub> (mA)	Min (mcd)	Typ (mcd)	I <sub>F</sub> (mA)	
	LAP-301VB/VL	Red	448	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	650	20	10	14	36	10
	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	448	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	605	20	10	56	250	10
	LAP-401VD/VN	Red	448	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	650	20	10	14	36	10
	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	448	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	605	20	10	56	250	10
	LAP-601VB/VL	Red	448	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	650	20	10	14	36	10
	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	448	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	605	20	10	56	250	10





注: \*I<sub>FP</sub>的条件为Duty≤1/5, Pulse width≤1ms

两位数LED数字显示器																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings (T <sub>s</sub> =25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics (T <sub>s</sub> =25°C)									
			Power Dissipation P <sub>o</sub> (mW)	Forward Current I <sub>F</sub> (mA)	Peak Forward Current I <sub>FP</sub> * (mA)	Reverse Voltage V <sub>R</sub> (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage V <sub>F</sub>		Reverse Current I <sub>R</sub>		Light Wavelength Peak Half-wave			Luminous Intensity/Digit I <sub>v</sub>		
								Typ (V)	I <sub>F</sub> (mA)	Max (μA)	V <sub>R</sub> (V)	λ <sub>p</sub> Typ (nm)	Δλ Typ (nm)	I <sub>F</sub> (mA)	Min (mcd)	Typ (mcd)	I <sub>F</sub> (mA)	
	LBP-602VA2/VK2	Red	896	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	650	20	10	14	36	10
	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	896	20	60	5	-25 to +75	-30 to +85	1.9	10	100	3	605	20	10	56	250	10

注: \*I<sub>FP</sub>的条件为Duty≤1/5, Pulse width≤1ms




# LED数字显示器

一位数数字显示器系列备有8~14.6mm的字符高度和红、绿发光颜色。


一位数LED数字显示器																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings (T <sub>a</sub> =25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics (T <sub>a</sub> =25°C)									
			Power Dissipation P <sub>o</sub> (mW)	Forward Current I <sub>F</sub> (mA)	Peak Forward Current I <sub>FP</sub> * (mA)	Reverse Voltage V <sub>R</sub> (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage V <sub>F</sub>		Reverse Current I <sub>R</sub>		Light Wavelength Peak Half-wave		Luminous Intensity/Digit I <sub>v</sub>			
									Typ (V)	I <sub>F</sub> (mA)	Max (μA)	V <sub>R</sub> (V)	λ <sub>p</sub> Typ (nm)	Δλ Typ (nm)	I <sub>F</sub> (mA)	Min (mcd)	Typ (mcd)	I <sub>F</sub> (mA)
 Character Height: 8mm External Dimensions: (7x11)	LA-301VB/VL	Red	320	15	60	5	-25 to +75	-30 to +85	2.0	10	100	3	650	40	10	3.6	10	10
	LA-301MB/ML	Green	480	20	60	5	-25 to +75	-30 to +85	2.1	10	100	3	563	40	10	3.6	10	10
	LA-301AB/AL	High luminous intensity Red	520	25	50	5	-25 to +75	-30 to +85	2.05	20	100	3	626	18	20	36	90	10
	LA-301EB/EL	High luminous intensity Orange	520	25	50	5	-25 to +75	-30 to +85	2.05	20	100	3	610	17	20	36	90	10
 Character Height: 10.16mm External Dimensions: (9.6x13)	LA-401VD/VN	Red	320	15	60	5	-25 to +75	-30 to +85	2.0	10	100	3	650	40	10	5.6	16	10
	LA-401MD/MN	Green	480	20	60	5	-25 to +75	-30 to +85	2.1	10	100	3	563	40	10	5.6	16	10
	LA-401AD/AN	High luminous intensity Red	520	25	50	5	-25 to +75	-30 to +85	2.05	20	100	3	626	18	20	36	90	10
	LA-401ED/EN	High luminous intensity Orange	520	25	50	5	-25 to +75	-30 to +85	2.05	20	100	3	610	17	20	36	90	10
 Character Height: 13mm External Dimensions: (12.5x17.5)	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	480	20	60	5	-25 to +75	-30 to +85	2.1	10	100	3	563	40	10	5.6	16	10
 Character Height: 14.6mm External Dimensions: (12.5x19)	LA-601VB/VL	Red	480	20	60	5	-25 to +75	-30 to +85	2.0	10	100	3	650	40	10	5.6	14	10
	LA-601MB/ML	Green	480	20	60	5	-25 to +75	-30 to +85	2.1	10	100	3	563	40	10	9.0	22	10
	LA-601AB/AL	High luminous intensity Red	520	25	50	5	-25 to +75	-30 to +85	2.05	20	100	3	626	18	20	36	90	10
	LA-601EB/EL	High luminous intensity Orange	520	25	50	5	-25 to +75	-30 to +85	2.05	20	100	3	610	17	20	36	90	10

注：\*I<sub>FP</sub>的条件为Duty≤1/5, Pulse width≤1 ms, 高亮度和蓝色I<sub>FP</sub>为Duty≤1/10, Pulse width≤0.1 ms

两位数数字显示器系列备有10.16~14.3mm的字符高度和红、绿发光颜色。

两位数LED数字显示器																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings (T <sub>a</sub> =25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics (T <sub>a</sub> =25°C)									
			Power Dissipation P <sub>o</sub> (mW)	Forward Current I <sub>F</sub> (mA)	Peak Forward Current I <sub>FP</sub> * (mA)	Reverse Voltage V <sub>R</sub> (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage V <sub>F</sub>		Reverse Current I <sub>R</sub>		Light Wavelength Peak Half-wave		Luminous Intensity/Digit I <sub>v</sub>			
									Typ (V)	I <sub>F</sub> (mA)	Max (μA)	V <sub>R</sub> (V)	λ <sub>p</sub> Typ (nm)	Δλ Typ (nm)	I <sub>F</sub> (mA)	Min (mcd)	Typ (mcd)	I <sub>F</sub> (mA)
 Character Height: 10.16mm External Dimensions: (24x18)	LB-402VD/VN	Red	640	15	60	5	-25 to +75	-30 to +85	2.0	10	100	3	650	40	10	5.6	16	10
	LB-402MD/MN	Green	960	20	60	5	-25 to +75	-30 to +85	2.1	10	100	3	563	40	10	9.0	25	10
 Character Height: 13mm External Dimensions: (25x17.5)	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	10
	LB-502MD/MN	Green	960	20	60	5	-25 to +75	-30 to +85	2.1	10	100	3	563	40	10	9.0	25	10
 Character Height: 14.3mm External Dimensions: (25x19)	LB-602VA2/VK2	Red	960	20	60	5	-25 to +75	-30 to +85	2.0	10	100	3	650	40	10	5.6	16	10
	LB-602MA2/MK2	Green	960	20	60	5	-25 to +75	-30 to +85	2.1	10	100	3	563	40	10	9.0	25	10
	LB-602AA2/AK2	High luminous intensity Red	1,040	25	50	5	-25 to +75	-30 to +85	2.05	20	100	3	626	18	20	36	90	10
	LB-602EA2/EK2	High luminous intensity Orange	1,040	25	50	5	-25 to +75	-30 to +85	2.05	20	100	3	610	17	20	36	90	10


注：\*I<sub>FP</sub>的条件为Duty≤1/5, Pulse width≤1 ms, 高亮度和蓝色I<sub>FP</sub>为Duty≤1/10, Pulse width≤0.1 ms

三位数LED数字显示器																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings (T <sub>a</sub> =25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics (T <sub>a</sub> =25°C)									
			Power Dissipation P <sub>o</sub> (mW)	Forward Current I <sub>F</sub> (mA)	Peak Forward Current I <sub>FP</sub> * (mA)	Reverse Voltage V <sub>R</sub> (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage V <sub>F</sub>		Reverse Current I <sub>R</sub>		Light Wavelength Peak Half-wave		Luminous Intensity/Digit I <sub>v</sub>			
									Typ (V)	I <sub>F</sub> (mA)	Max (μA)	V <sub>R</sub> (V)	λ <sub>p</sub> Typ (nm)	Δλ Typ (nm)	I <sub>F</sub> (mA)	Min (mcd)	Typ (mcd)	I <sub>F</sub> (mA)
 Character Height: 14.3mm External Dimensions: (37.5x18)	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

注：\*I<sub>FP</sub>的条件为Duty≤1/5, Pulse width≤1 ms

## 表面贴装LED数字显示器

ROHM的LED数字显示器支持自动回流处理。

一位数LED数字显示器																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings (T <sub>a</sub> =25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics (T <sub>a</sub> =25°C)									
			Power Dissipation P <sub>o</sub> (mW)	Forward Current I <sub>F</sub> (mA)	Peak Forward Current I <sub>FP</sub> * (mA)	Reverse Voltage V <sub>R</sub> (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage V <sub>F</sub>		Reverse Current I <sub>R</sub>		Light Wavelength Peak Half-wave		Luminous Intensity/Digit I <sub>v</sub>			
									Typ (V)	I <sub>F</sub> (mA)	Max (μA)	V <sub>R</sub> (V)	λ <sub>p</sub> Typ (nm)	Δλ Typ (nm)	I <sub>F</sub> (mA)	Min (mcd)	Typ (mcd)	I <sub>F</sub> (mA)
 Character Height: 8mm External Dimensions: (6.8x11)	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	60	5	-25 to +75	-30 to +85	2.1	10	100	3	563	40	10	3.6	10	10

注：\*I<sub>FP</sub>的条件为Duty≤1/5, Pulse width≤1 ms