



光学元器件

# LED 显示器

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## 高亮度LED数字显示器

拥有高亮度、低功耗和高可靠性。

高亮度LED数字显示器																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings(Ta=25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics(Ta=25°C)									
			Power Dissipation P <sub>0</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		Brightness/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:(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											605			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											605			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											605			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											605			56	250	

 注) \* I<sub>R</sub>的条件为duty ≤ 1/5, Pulse width ≤ 1ms

## LED数字显示器

罗姆的LED数字显示器支持自动回流处理。

一位数LED数字显示器(表面贴装型)																		
Shape	Part No.	Emitting Color	Absolute Maximum Ratings(Ta=25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics(Ta=25°C)									
			Power Dissipation P <sub>0</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		Brightness/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:(6.8×11)	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					

 注) \* I<sub>R</sub>的条件为duty ≤ 1/5, Pulse width ≤ 1ms

一位数数字显示器系列可显示的8 to 25.4mm字符高度和发光颜色。

一位数LED数字显示器																							
Shape	Part No.	Emitting Color	Absolute Maximum Ratings(Ta=25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics(Ta=25°C)														
			Power Dissipation P <sub>o</sub> (mW)	Forward Current I <sub>F</sub> (mA)	Peak Forward Current I <sub>Fp</sub> <sup>*</sup> (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		Brightness/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)	λ <sub>h</sub> Typ. (nm)	I <sub>F</sub> (mA)	Min. (mcd)	Typ. (mcd)	I <sub>F</sub> (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				563	40	10	5.6	16							
	LA-301AB/AL	High Brightness Red	520	25	50			2.05	20			626	18	20	36	90							
	LA-301EB/EL	High Brightness Orange						610				17											
	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					2.1				563	40	10	5.6	16						
	LA-401AD/AN	High Brightness Red	520	25	50				2.05	20			626	18	20	36	90						
	LA-401ED/EN	High Brightness Orange							610				17										
	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							2.1				563	40	10	5.6	16						
	LA-601VB/VL	Red	520	25	50				2.0	20			626	18	20	36	90						
	LA-601MB/ML	Green							2.1				563	9.0					22				
LA-601AB/AL	High Brightness Red	520	25	50	5	-25 to +75	-30 to +85	2.05	20	100	3	626	18	20	36	90							
LA-601EB/EL	High Brightness Orange							610				17											
	LA-101VA/VK	Red	640	15				60	5			-25 to +75	-30 to +85	4.0	10	100	3	650	40	10	3.6	10	10
	LA-101MA/MK	Green	20	4.2										563				40	10	5.6	16		

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 2) LA-101系列: 接受订货后生产。

两位数数字显示器系列可显示的10.16 to 14.3mm字符高度和发光颜色。

两位数LED数字显示器																								
Shape	Part No.	Emitting Color	Absolute Maximum Ratings(Ta=25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics(Ta=25°C)															
			Power Dissipation P <sub>o</sub> (mW)	Forward Current I <sub>F</sub> (mA)	Peak Forward Current I <sub>Fp</sub> <sup>*</sup> (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		Brightness/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)	λ <sub>h</sub> Typ. (nm)	I <sub>F</sub> (mA)	Min. (mcd)	Typ. (mcd)	I <sub>F</sub> (mA)							
	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	2.1	563					9.0				25											
	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	2.1	563										9.0					25					
	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									2.1							563	9.0	25				
	LB-602AA2/AK2	High Brightness Red	1,040	25	50				5	-25 to +75	-30 to +85	2.05	20			100	3	626	18	20	36	90		
	LB-602EA2/EK2	High Brightness Orange										610						17						

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(Ta=25°C)				Absolute Maximum Ratings		Electrical and Optical Characteristics(Ta=25°C)									
			Power Dissipation P <sub>o</sub> (mW)	Forward Current I <sub>F</sub> (mA)	Peak Forward Current I <sub>Fp</sub> <sup>*</sup> (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		Brightness/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)	λ <sub>h</sub> Typ. (nm)	I <sub>F</sub> (mA)	Min. (mcd)	Typ. (mcd)	I <sub>F</sub> (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

注) \* I<sub>Fp</sub>的条件为duty ≤ 1/5, Pulse width ≤ 1ms

