GL3□ 404/ GL3□ 403 Series

8.4mm Character Height Numeric LEDs

■ Model No.

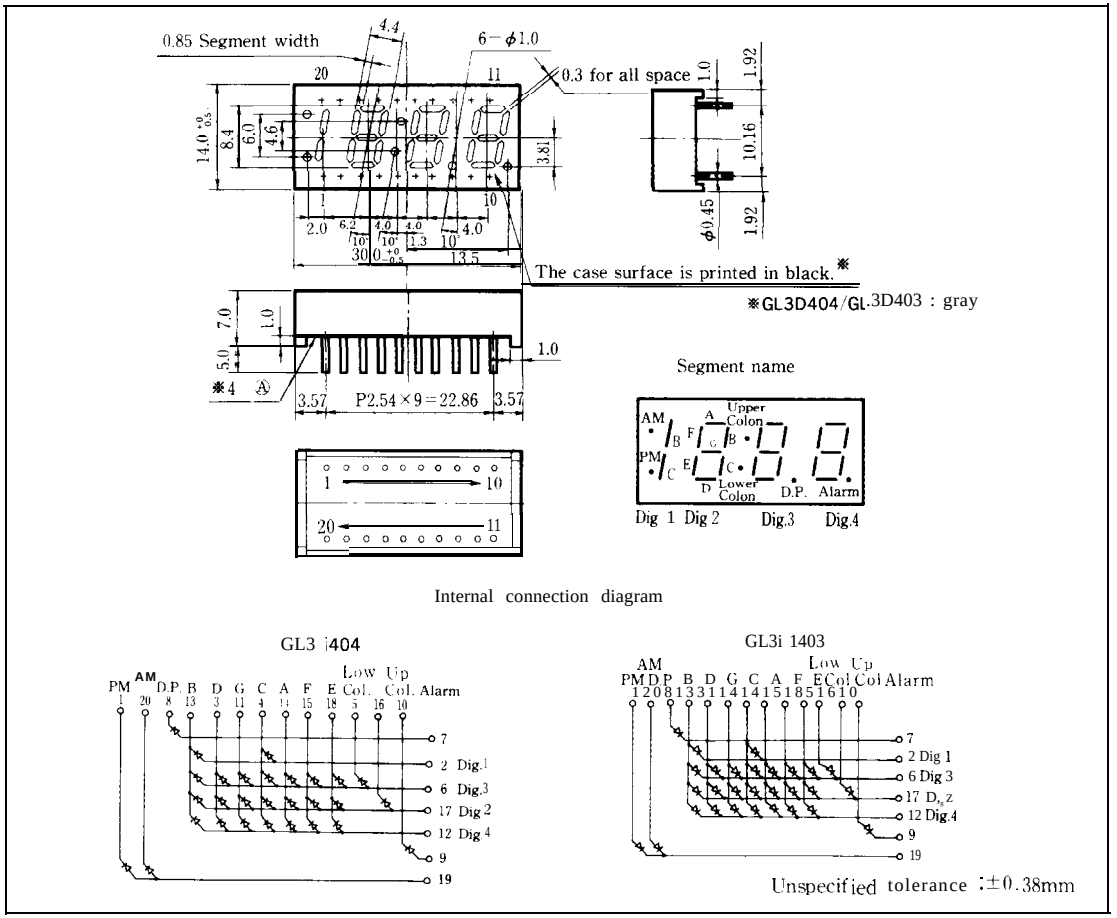
GL3P404/GL3P403	Red	GaP
GL3D404/GL3D403	Red	GaAsP/GaP
GL3E404/GL3E403	Yellow-green	GaP

■ Features

1. Character height : 8.4mm
2. 3 1/2 digits
3. Case mold type
4. Diamond cut type segments

■ Outline Dimensions

(Unit: mm)



GL3□404 / GL3□403

■ Absolute Maximum Ratings

(Ta = 25℃)

Parameter			Symbol	GL3P404 GL3P403	GL3D404 GL3D403	GL3E404 GL3E403			Unit
Power dissipation	※1 Per digit		P	175	322	263			mW
Continuous forward current	※1 Per digit		I_F	70	140	105			mA
	※2		I_F	10	20	15			mA
※3 Peak forward current	※2		I_{FM}	50	50	50			mA
Derating factor	※2	DC	–	0.18	0.36	0.27			mA/℃
		Pulse	–	0.91	0.91	0.91			mA/℃
Reverse voltage	Per segment		V_R	5	5	5			V
	Per decimal point		V_R	5	5	5			V
Operating temperature			T_{opr}	−30 to +70					℃
Storage temperature			T_{stg}	−40 to +80					℃
※4 Soldering temperature			T_{sol}	260 (within 5 seconds)					℃

※1 Per digit: 7 segments
※2 Per segment, or per decimal point
※3 Duty ratio = 1/10, Pulse width = 0.1ms
※4 At the position of 2,6 mm from Ⓐ level of outline dimensions

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GL3P404/GL3P403(Red) ,GL3D404/GL3D403(Red)

■ Electro-optical Characteristics

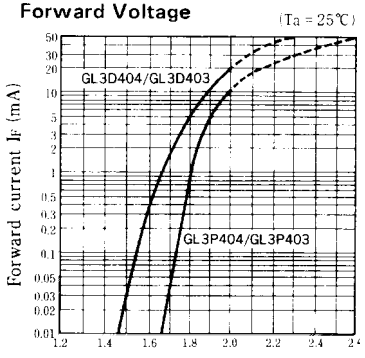
(Ta=25℃)

Parameter		Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	Per segment	V_F	GL3P404/GL3P403	I_F=5mA		1.9	2.5	V
			GL3D404/GL3D403	I_F=10mA	–	**1.85**	2.3	
	Per decimal point		GL3P404/GL3P403	I_F=5mA		1.9	2.5	V
			GL3D404/GL3D403	I_F=10mA		1.85	2.3	
※5 Luminous intensity	Per segment	I\	GL3P404/GL3P403	I_F=5mA	0.15	0.30	–	mcd
			GL3D404/GL3D403	I_F=10mA	0.3	0.8	–	
	Per decimal point		GL3P404 /GL3P403	I_F=5mA	0.06	0.12	–	mcd
			GL3D404/GL3D403	I_F=10mA	0.1	0.3	–	
※2 Peak emission wavelength		λ_p	GL3P404/GL3P403	I_F=5mA		695	–	‘m
			GL3D404/GL3D403	I_F=10mA	–	635	–	
※2 Spectrum radiation bandwidth		$\Delta\lambda$	GL3P404/GL3P403	I_F=5mA	–	100	–	nm
			GL3D404/GL3D403	I_F=10mA	–	35	–	
Reverse current	Per segment	I_R	GL3P404/GL3P403	V_R=4V	–	–	10	μA
			GL3D404/GL3D403	V_R=4V		–	10	
	Per decimal point		GL3P404/GL3P403	V_R=4V	–		10	μA
			GL3D404/GL3D403	V_R=4V	–	–	10	
※2 Response frequency		f_c	GL3P404/GL3P403	–	–	4	–	MHz
			GL3D404/GL3D403	–	–	4	–	

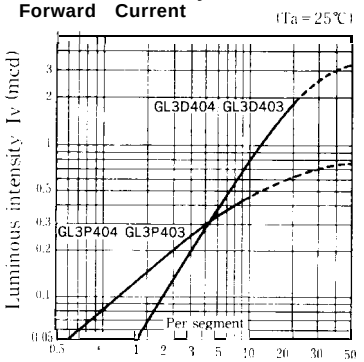
※2 Per segment, or per decimal point
※5 Tolerance: ±30%

■ Characteristics Diagrams

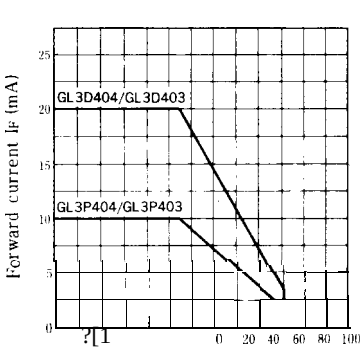
Forward Current vs. Forward Voltage



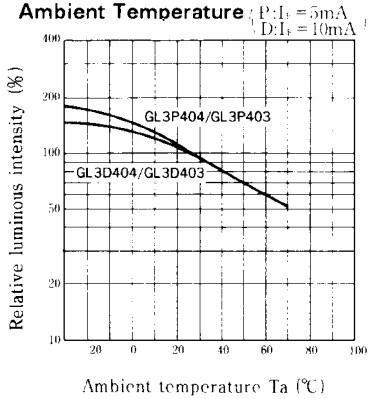
Luminous Intensity vs. Forward Current



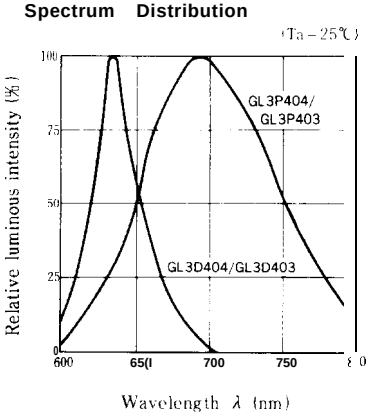
Forward Current Derating Curve



Relative Luminous Intensity vs. Ambient Temperature



Spectrum Distribution



GL3E404/GL3E403(Yellow-green)

■ Electro-optical Characteristics

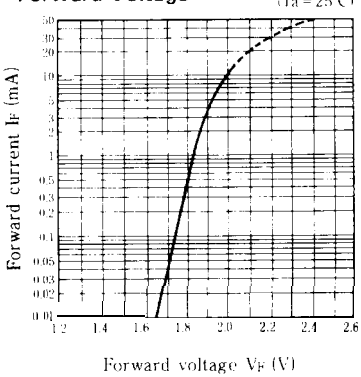
(Ta=25℃)

Parameter		Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	Per segment	V_F	GL3E404/GL3E403	I_F=10mA	–	2.0	2.5	V
	Per decimal point		GL3E404/GL3E403	I_F=10mA		2,0	2.5	
※5 Luminous intensity	Per segment	I_V	GL3E404 'GL3E403	I_F=10mA	**0.80**	2.00	–	mcd
	Per decimal point		GL3E404/GL3E403	I_F=10mA	0.20	0.50	–	mcd
※2 Peak emission wavelength		λ_p	GL3E404/GL3E403	I_F=10mA		565	–	nm
※2 Spectrum radiation bandwidth		$\Delta\lambda$	GL3E404/GL3E403	I_F=10mA	–	30	–	nm
Reverse current	Per segment	I_R	GL3E404/GL3E403	V_R=4V	–		10	μA
	Per decimal point		GL3E404/GL3E403	V_R=4V		–	10	μA
※2 Response frequent y		f_c	GL3E404 'GL3E403	–	–	4	–	MHz

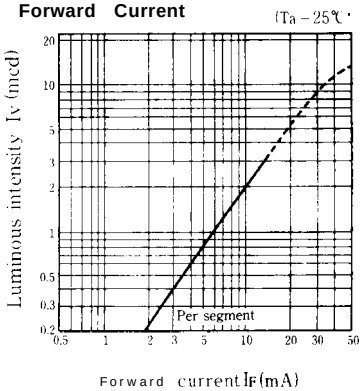
※2 Per segment, or per decimal point
※5 Tolerance: ±30%

■ Characteristics Diagrams

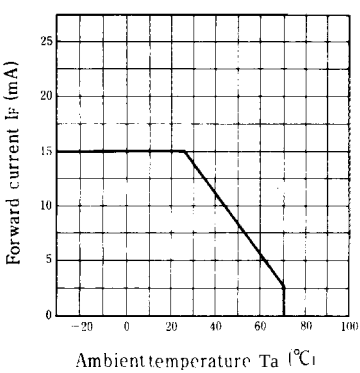
Forward Current vs. Forward Voltage



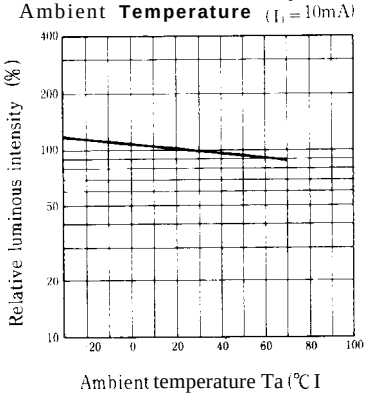
Luminous Intensity vs. Forward Current



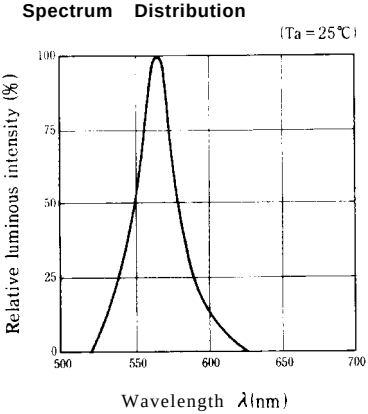
Forward Current Derating Curve



Relative Luminous Intensity vs. Ambient Temperature (I_F=10mA)



Spectrum Distribution



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