

LT5016ED

1 6X 16 Dot Matrix LEDs Dichromatic

Model No.

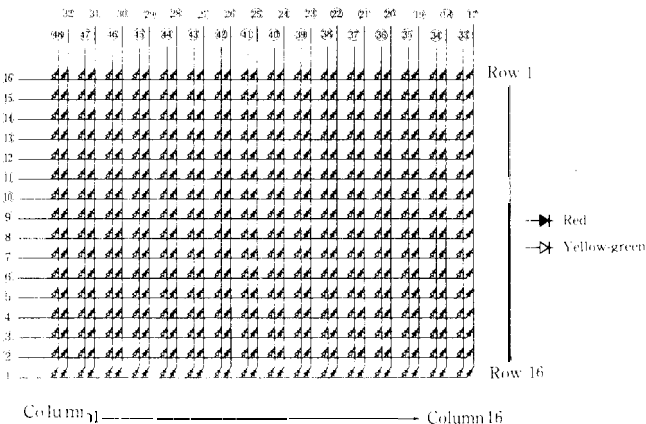
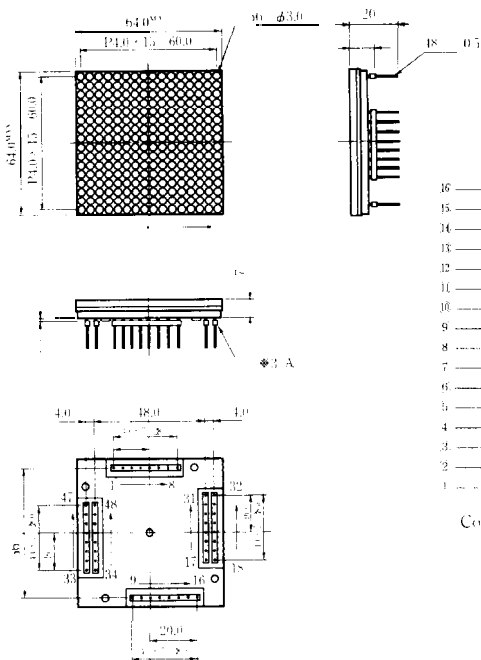
LT5016ED Yellow-green GaP
Red GaAsP/GaP

Features

1. Substrate type
2. 2.36" character height
3. Radiation color : Red, yellow-green and orange (mixed color)

Outline Dimensions

(Unit : mm)



Pin connect.,"

No.	Function	No.	Function	No.	Function
1	Row 16 Anode	17	Column 16 R Cathode	33	Column 16 Yg Cathode
2	Row 15 Anode	18	Column 15 R Cathode	34	Column 15 Yg Cathode
3	Row 14 Anode	19	Column 14 R Cathode	35	Column 14 Yg Cathode
4	Row 13 Anode	20	Column 13 R Cathode	36	Column 13 Yg Cathode
5	Row 12 Anode	21	Column 12 R Cathode	37	Column 12 Yg Cathode
6	Row 11 Anode	22	Column 11 R Cathode	38	Column 11 Yg Cathode
7	Row 10 Anode	23	Column 10 R Cathode	39	Column 10 Yg Cathode
8	Row 9 Anode	24	Column 9 R Cathode	40	Column 9 Yg Cathode
9	Row 8 Anode	25	Column 8 R Cathode	41	Column 8 Yg Cathode
10	Row 7 Anode	26	Column 7 R Cathode	42	Column 7 Yg Cathode
11	Row 6 Anode	27	Column 6 R Cathode	43	Column 6 Yg Cathode
12	Row 5 Anode	28	Column 5 R Cathode	44	Column 5 Yg Cathode
13	Row 4 Anode	29	Column 4 R Cathode	45	Column 4 Yg Cathode
14	Row 3 Anode	30	Column 3 R Cathode	46	Column 3 Yg Cathode
15	Row 2 Anode	31	Column 2 R Cathode	47	Column 2 Yg Cathode
16	Row 1 Anode	32	Column 1 R Cathode	48	Column 1 Yg Cathode

R: Red Yg: Yellow-green

SHARP

LT5016ED

■ Absolute Maximum Ratings

(Ta = 25°C)

Parameter	symbol	LT5016ED		Unit
		Yellow-green	Red	
*1 Power dissipation	P	4560		mW
Continuous forward current	I _f	15	15	mA
*2 Peak forward current	I _{FM}	80	80	mA
Derating factor	Per dot	DC	—	mA/°C
		Pulse	1.45	1.45
Reverse voltage	V _R	5	5	V
Operating temperature	T _{opr}	-20 to +60		°C
Storage temperature	T _{stg}	-20 to +80		°C
*3 Soldering temperature	T _{sol}	260(within 5 seconds)		°C

*1 Per device : 512 chips (256 chips each for red and yellow-green)

*2 Duty ratio = 1/16, Pulse width = 0.1ms

*3 At the position of 1.6 mm from (A) level of outline dimensions

LT5016ED(Yellow-gree n/Red)

■ Electro-optical Characteristics

(Ta = 25°C)

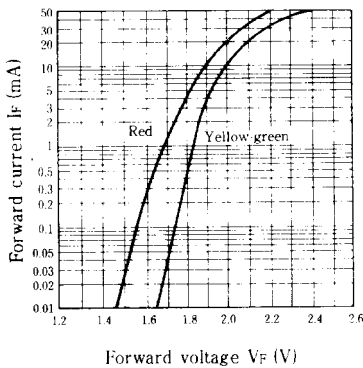
Parameter	Symbol	Radiation color	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V _F	Yellow-green	I _F = 10mA		2.0		V
		Red	I _F = 10mA	—	1.9	—	
		Yellow-green	I _F = 50mA	—	2.4	3.0	
		Red	I _F = 50mA	—	2.2	3.0	
*5 Luminous intensity	I _v	Yellow-green	I _F = 10mA	4.0	6.5	—	mcd
		Red	I _F = 10mA	3.0	5.0	—	
Peak emission wavelength	λ _p	Yellow-green	I _F = 50mA		565		nm
		Red	I _F = 50mA		635		
Spectrum radiation bandwidth	Δλ	Yellow-green	I _F = 50mA	—	—	30	nm
		Red	I _F = 50mA	—	—	35	
Reverse current	I _R	Yellow-green	V _R = 4V		10		μA
		Red	V _R = 4V		10	—	
Response frequent>	f _c	Yellow-green	--	—	4	—	MHz
		Red	--	—	4	—	

*4 Per dot

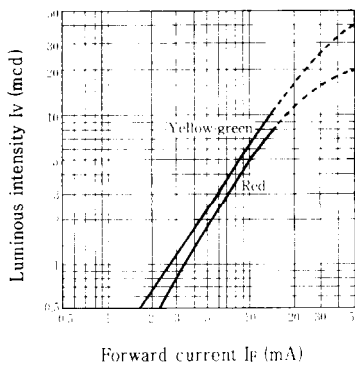
*5 Tolerance : ±30%

■ Characteristics Diagrams

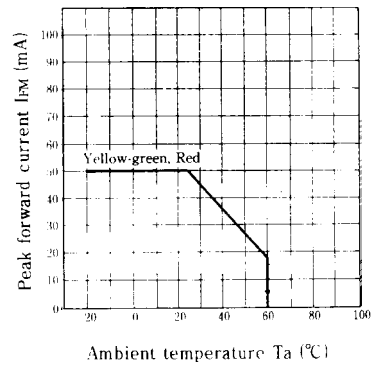
Forward Current vs. Forward Voltage (Ta = 25°C)



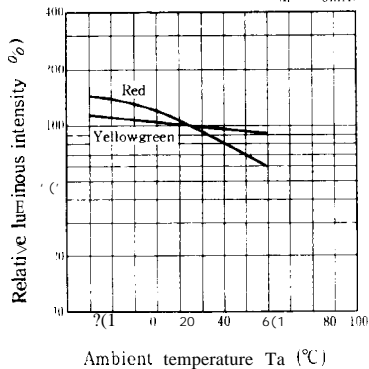
Luminous Intensity vs. Forward Current (Ta = 25°C)



Peak Forward Current Derating Curve



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



Spectrum Distribution (Ta = 25°C)

