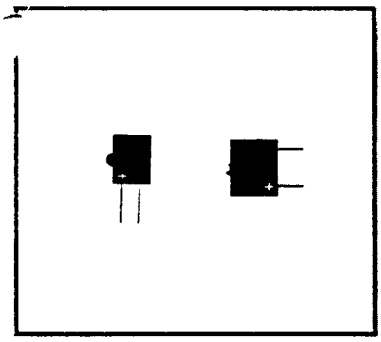
170-832
170-833

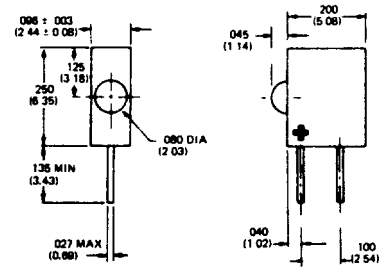


555 series

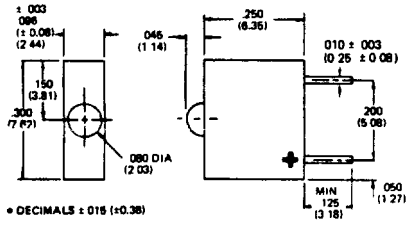
DIODE-LITE®

LED Circuit Board Indicators

555-200X



555-300X



( ) Metric dimension in mm.

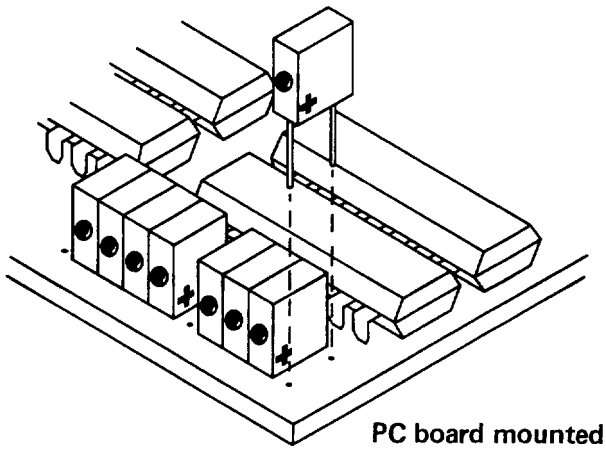
Absolute Maximum Ratings

Operating Temperature	−55° C to +75° C
Storage Temperature	−55° C to +100° C
Lead Soldering Temp	260° C for 5 secs

Part Number		LED Color	Test Cond	Current (mA)	
				Typ	Max.
555 2001	555-3001	Red	1 6V	*	*
555 2002	555-3002	Red	3 6V	20	25
555 2007	555-3007	Red	5 0V	3	4
555 2003	555-3003	Red	5 0V	6	8
555 2004	555-3004	Red	5 0V	16	20
555 2005	555-3005	Red	10 0V	14	16
555-2006	555-3006	Red	14 0V	10	12
555 2008	555-3008	Red	24 0V	3	4
555-2301	555-3301	Green	2 4V	*	*
555-2303	555-3303	Green	5 0V	4 7	6 7
555 2401	555 3401	Yellow	2 2V	*	*
555 2403	555-3403	Yellow	5 0V	4 7	6 7

*Requires External Resistor. Maximum DC forward current 40 mA Typical operating current 20 mA

These low cost LED circuit board indicators are extremely versatile devices that lend themselves to a wide range of applications. Typically they might be used as fault indicators for trouble shooting complex circuits.



PC board mounted

Applications

- Logic Status Indicator
- Binary data display— permits stacking so that multiple functions can be displayed
- Circuit board indicator

Features

- Low cost
- Very low power consumption
- High reliability—life measured in years
- Polarity identified
- Built-in series resistor
- Compact design permits dense packaging Units can be mounted 10 to the inch
- Black case enhances contrast ratio
- Available in a range of voltages and currents

Dialight reserves the right to make changes at anytime in order to improve design and to supply the best product possible.

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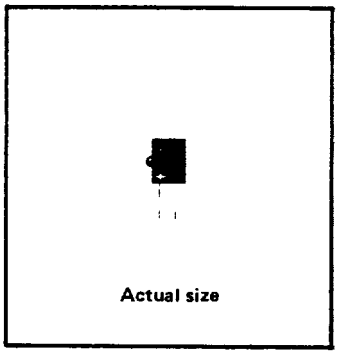
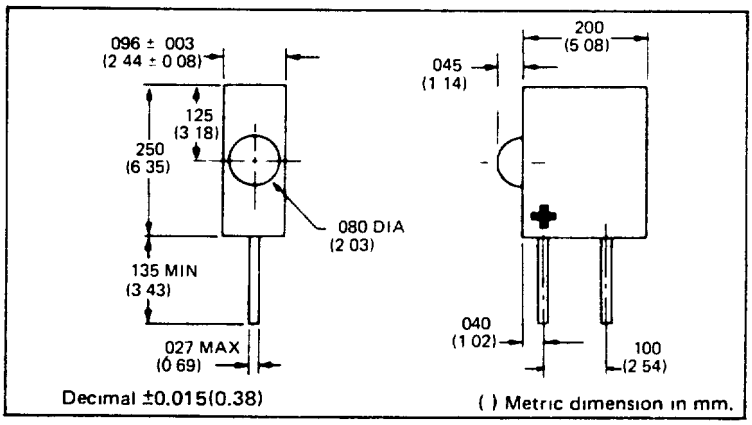


555-2001, 555-2003, 555-2004, 555-2007

DIODE-LITE®

LED Circuit Board Indicators



Applications

- Logic Status Indicator.
- Position Indicator.
- Circuit Board Indicator.

Features

- TTL Compatible.
- Current limited versions for 3mA, 6mA or 16mA operation at 5 volts.
- Positive seating and spacing of light source to PCB surface.
- Facilitates PCB mounting and wave soldering.
- Black case enhances contrast ratio.
- Compatible with 555-4000 series four element arrays.

Description

The 555-2000 **Diode-Lite** series are Gallium Arsenide Phosphide red Light Emitting Diodes.

The 555-2003, 555-2004 and 555-2007 have integral current limiting resistors for 6mA, 16mA or 3mA operation respectively at 5 volts.

The 555-2001 requires external current limiting.

A red diffused lens encased in black plastic enhances the on/off contrast ratio. This unique package also allows positive seating to the PCB surface to facilitate mounting and soldering operations. Units are stackable with elements and leads on 0 100 inch centers.

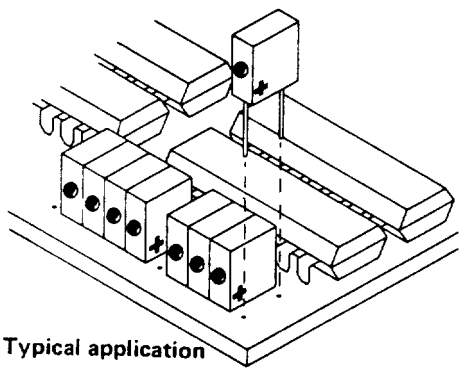
Maximum Ratings at $T_A = 25^\circ C$

Parameter	555-2001	555 2003 555 2004 555 2007	Units
Continuous Forward Voltage		6*	V
Continuous Forward Current	40**		mA
Reverse Voltage	3	6	V
Storage and Operating Temperature	-55° C to +100° C		
Lead Soldering Temperature (1/16" from case)	260° C for 5 seconds		

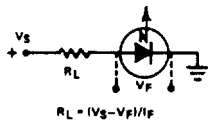
*Derate linearly to 5 0V at 75° C
**Derate above 25° C at 0 4 mA/° C

Operating Characteristics at $T_A = 25^\circ C$

Parameter	Units	Current Limiting Required			Current Limited						
		555-2001		Test	555-2003		555-2004		555-2007		Test
		Typ	Max	Conditions	Typ	Max	Typ	Max	Typ	Max	Conditions
Forward Current	mA				6 0	8 0	16 0	20 0	3 0	4 0	
Forward Voltage	V	1 6	2 0								
Luminous Intensity	mcd	3 0		I_F = 20 mA	1 2		2 0		0 6		V_F = 5 V
Peak Wavelength	nm	650			650		650		650		
Reverse Current	μA		100	V_R = 3 V		100		10		100	V_R = 6 V



Typical application



Note:
The 555-2001 requires external limiting resistors

Dialight reserves the right to make changes at anytime in order to improve design and to supply the best product possible.

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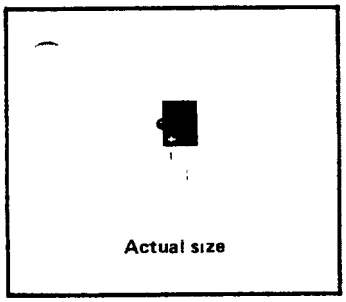
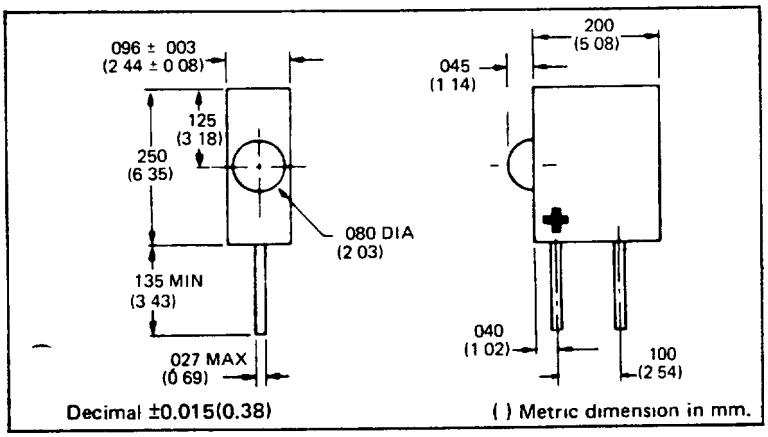


Green 555-2301, 555-2303
Yellow 555-2401, 555-2403
LED Circuit Board Indicators



Maximum Ratings at T_A= 25°C

Parameter	555-2301 555-2401	555-2303	555-2403	Units
Continuous Forward Voltage		6*	6*	V
Continuous Forward Current	25**			mA
Reverse Voltage	3	6	6	V
Storage and Operating Temperature	-55°C to +100°C			
Lead Soldering Temperature (1/16" from case)	260°C for 5 seconds			

*Derate above 25°C at 20 mV/°C
**Derate above 25°C at 0 4 mA/°C

Operating Characteristics at T_A= 25°C

Parameter	Units	Current Limiting Required				
		555-2301		555-2401		Test
		Typ.	Max.	Typ.	Max.	Conditions
Forward Current	mA					
Forward Voltage	V	2 4	3 0	2.2	3.0	
Luminous Intensity	mcd	1.0		2.0		I_F = 20 mA
Peak Wavelength	nm	565		583		
Reverse Current	μA	.15	10	15	10	V_R = 3V

Parameter	Units	Current Limited				
		555-2303		555-2403		Test
		Typ.	Max.	Typ	Max.	Conditions
Forward Current	mA	4 7	6.7	4.7	6.7	
Forward Voltage	V					
Luminous Intensity	mcd	.5		.6		V_F = 5V
Peak Wavelength	nm	565		583		
Reverse Current	μA	15	10	.15	10	V_R = 6V

Dialight reserves the right to make changes at anytime in order to improve design and to supply the best product possible.

Applications

- Logic Status Indicator.
- Position Indicator.
- Circuit Board Indicator.

Features

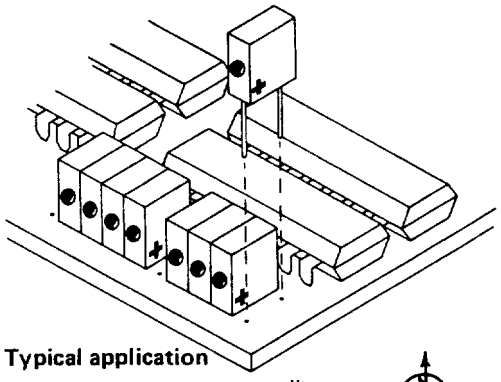
- TTL Compatible.
- Current limited version for 6 mA operation at 5 volts.
- Positive seating and spacing of light source to PCB surface.
- Facilitates PCB mounting and wave soldering.
- Black case enhances contrast ratio.
- Compatible with 555-4000 series four element arrays.

Description

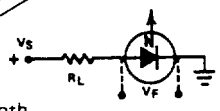
The 555-2303 and 555-2403 have integral current limiting resistors for 6 mA operation at 5 volts.

The 555-2301 and 555-2401 require external current limiting.

A yellow or green diffused lens encased in black plastic enhances the on/off contrast ratio. This unique package also allows positive seating to the PCB surface to facilitate mounting and wave soldering operations. Units are stackable with elements and leads on 0.100 inch centers.



Typical application



Note:
The 555-2301 and 555-2401 both require external limiting resistors.