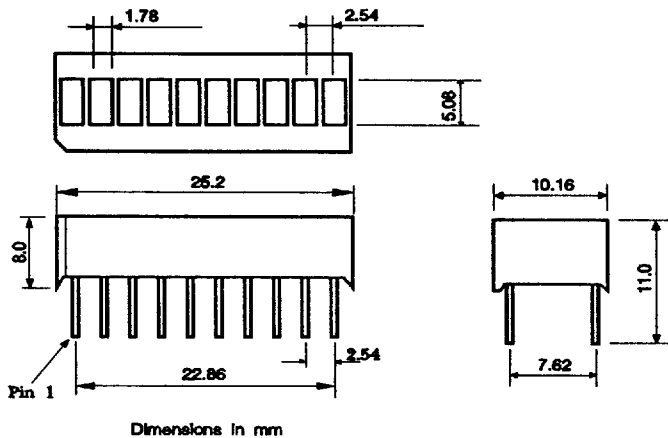


SPECIAL BARGRAPH DISPLAY SYSTEMS

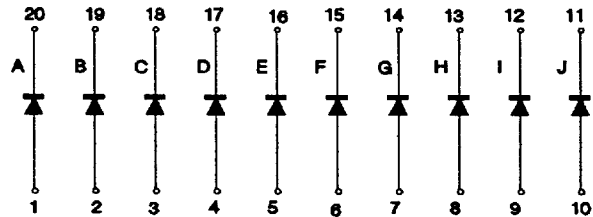


H.E. RED, YELLOW, GREEN - ISD4832
H.E. RED, YELLOW, GREEN, H.E. RED - ISD4836
CUSTOM COLOURS - ISDNRYNG

PACKAGE DIMENSIONS



INTERNAL CONNECTIONS



DESCRIPTION

A range of solid state bar-graph display systems employing LED technology to provide versatile indicator systems across a wide range of applications.

The ISD *RHGY* range of bar-graph displays provide ten segment elements in a range of three colours with both bright red and high efficiency red options, with the additional benefit of a custom colour selection system, allowing the customer to specify colour combinations within the ten available segments. Additionally the ISD4000 range provides an 'off the shelf' range of multicolour bar-graph display systems.

The displays are manufactured in an industry standard 20 pin dual-in-line package, end stackable to allow larger bar-graphs with multiple colour options to be constructed.

FEATURES

- 10 Segments per display.
- Custom segment colour combinations.
- Choice of colours
- Standard 20 pin dual-in-line package
- End stackable
- Wide viewing angle
- Solid state reliability

APPLICATIONS

- Level indicators
- Audio equipment
- Control systems
- Consumer electronics
- Test equipment
- Instrumentation

ISDS4832 Comprises - 3 H.E. Red, 4 Yellow and 3 Green Segments.

ISDS4836 Comprises- 2 H.E. Red, 2 Yellow, 2 Green 2 Yellow and 2 H.E. Red Segments.

ISOCOM COMPONENTS LTD.

Unit 25B, Park View Road West, Park View Industrial Estate, Brenda Road,
Hartlepool, Cleveland, England, TS25 1YD.

Tel: (0429) 863609. Fax: (0429) 863581. Telex: 587712 ISCOMPG.

ISOCOM INC.

274 East Hamilton Avenue, Suite E, Campbell, California, 95008, U.S.A.
Tel: (408) 370 2212. Fax: (408) 370 2309.

DA-90013-AAS/01

9000-2571

ABSOLUTE MAXIMUM RATINGS (Ta=25°)

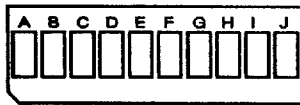
	RED	YELLOW	H.E. RED	GREEN
Average power dissipation per Segment	40mW	75mW	75mW	75mW
Peak Forward current per segment	60mA	100mA	100mA	100mA
DC forward current per Segment	15mA	25mA	25mA	25mA
Operating Temperature	-25°C to +85°C	-25°C to +85°C	-25°C to +85°C	-25°C to +85°C
Storage Temperature	-25°C to +85°C	-25°C to +85°C	-25°C to +85°C	-25°C to +85°C
Reverse Voltage per Segment	5.0V	5.0V	5.0V	5.0V
Soldering time at 260°C (1.6mm below seating plane)	3 seconds	3 seconds	3 seconds	3 seconds

ELECTRICAL/OPTICAL CHARACTERISTICS AT Ta = 25°C

PARAMETER	TEST CONDITIONS	UNITS		RED	YELLOW	H. E. RED	GREEN
Luminous Intensity per Segment (display Average)	If = 10mA	μcd	Min. Typ.	500 1700	500 1700	500 1700	500 1700
Peak Emission Wavelength	If = 10mA	nm	Typ.	700	585	630	565
Spectral Line Halfwidth	If = 10mA	nm	Typ.	60	20	20	15
Forward Voltage per Segment	If = 20mA If = 10mA	V	Max.	3.0	3.0	3.0	3.0
Reverse Voltage per Segment	Ir = 100uA	V	Min.	5.0	5.0	5.0	5.0
Luminous Intensity Matching Ratio	If = 10mA	Iv(m)	Max.	2:1	2:1	2:1	2:1

Custom Bargraph Key

- R = Red
- H = Hi. eff. Red
- G = Green
- Y = Yellow



E.G.

For the following display:-

- Segments A,B,C
- Segments D,E,F,G
- Segments H,I,J

Order the following:-

- Green ISD3G4Y3R
- Yellow
- Red

Fig. 1 Forward Current vs. Forward Voltage **Fig. 2 Luminous Intensity vs. Angular Displacement** **Fig. 3 Luminous Intensity vs. Forward Current**

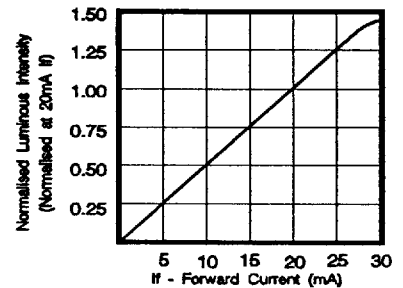
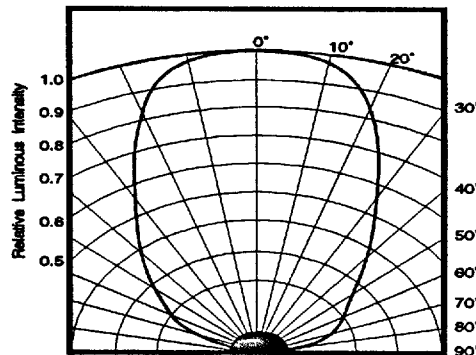
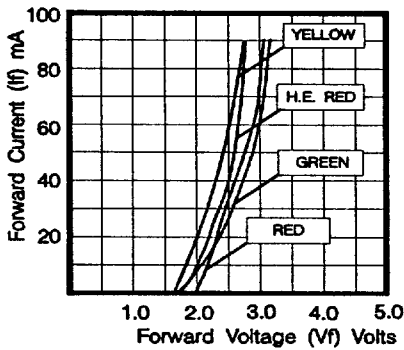
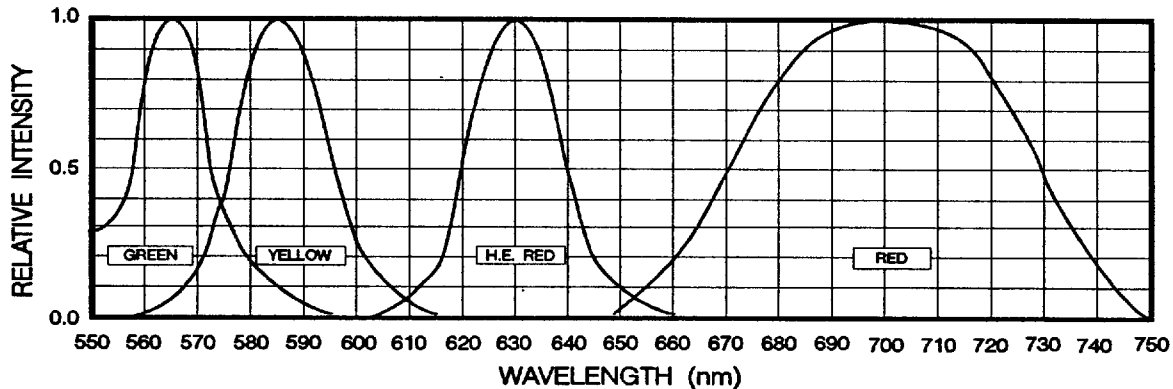


Fig. 4 Relative Intensity vs. Wavelength



NOTES

- 1) The Digit Luminous intensity is obtained by summing the Luminous intensity of each Segment and dividing by the Total Number of Segments. Intensity will not vary more than +/- 33.3% between all Segments within a digit.
- 2) All Displays are characterised for Luminous Intensity. The Intensity category is marked on each part as a suffix letter to the date code.
- 3) For Flux removal, Freon TF, Freon TE, or Isoproponal may be used up to their boiling points.