## **Fiber Optic LAN Components**

# HFX6015-xxx

### 660nm LED

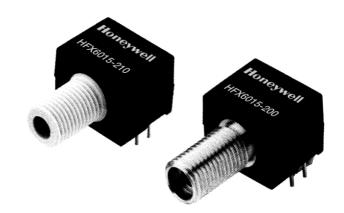
## For Industrial Bus Systems

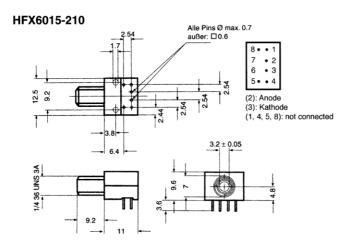
#### **FEATURES**

- Super bright LED for optical fiber communication
- High accuracy by use of special plastic package with centered LED chip
- High output at suitable peak wavelength (typ.) for plastic fiber
- High frequency cut-off, most suited for high speed data transmissions (fc = typ. 7 MHz)

#### HFX6015-200 only

- · Metal barrel for high mechanical stability
- Separate grounding of barrel for optimum EMI/RFI shielding







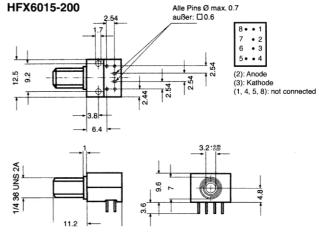


Fig. 2

#### SERCOS HFX6015-210 (Fig.1) and HFX6015-200 (Fig.2)

Parameter	Test Conditions	Symbol	Min	Тур	Max	Units
Coupled Power	I <sub>F</sub> = 50mA*, 1mm fibre	P <sub>C</sub>	700		1400	μW

Note: Available for all products with date code 03.05 or later

#### PROFIBUS HFX6015-4xx

Parameter	Test Conditions	Symbol	Min	Тур	Max	Units
Coupled Power	1mm fibre	P <sub>C</sub>	-5.5			dbm

#### **GENERAL PURPOSE BUS APPLICATIONS**

Parameter	Test Conditions	Symbol	Min	Тур	Max	Units
Coupled Power	I <sub>F</sub> = 50mA*, 1mm fibre	P <sub>c</sub>	300			μW

Note: \* Derate Linearly from 25°C: 0.93mA/°C DC current

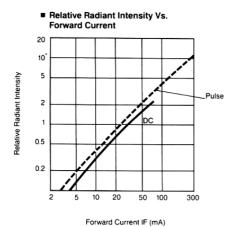
Other receptacles available. For additional information see please "Mounted LEDs/Transmitters"

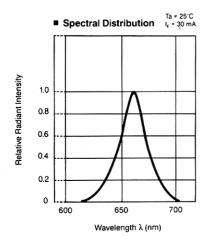
## HFX6015-xxx

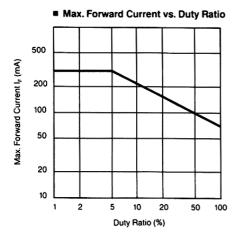
# **Fiber Optic LAN Components**

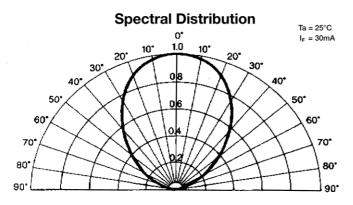
## 660nm LED

## For Industrial Bus Systems

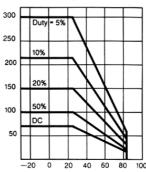






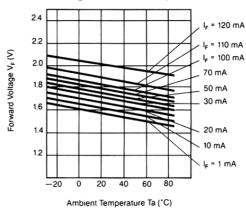


# Max. Forward Current vs. Ambient Temperature

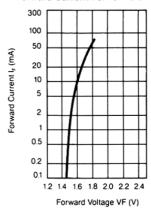


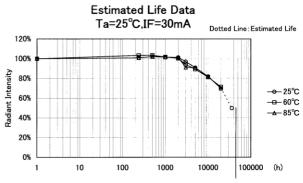
Ambient Temperature Ta (\*C)

#### Forward Voltage vs. Ambient Temperature



#### ■ Forward Current Vs. Forward Voltage





Estimation: Radiant Intensity becomes half of the initial value when it reaches 36,000h

## **Fiber Optic LAN Components**

#### 660nm LED

## For Industrial Bus Systems

#### **ABSOLUTE MAXIMUM RATINGS**

#### **ELECTRO OPTICAL CHARACTERISTICS**

Parameter	Test Conditions	Symbol	Min	Тур	Max	Units
Peak Wavelength	I <sub>F</sub> = 30mA *	λ <sub>P</sub>		660		nm
Spectral Line Half Width	I <sub>F</sub> = 30mA *	Δλ		30		nm
Forward Voltage	I <sub>F</sub> = 30mA *	$V_{F}$		2.0	2.5	V
Reverse Current	$V_R = 4V$	I <sub>R</sub>			100	μΑ
Capacitance		C <sub>o</sub>		50		pF
Response Time	I <sub>F</sub> = 30mA *	t <sub>r</sub> , t <sub>f</sub>		50		ns

Note: \* Derate Linearly from 25°C: 0.93mA/°C DC current

#### WARRANTY/REMEDY

particular purpose.

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