LED850-1 OECA-ST146 — 850nm LED

Description

The LED850-1 OECA-ST146 is a 850nm LED in a plastic DIP receptacle with ST-flange. The assembled TO-46 device is electrical isolated from the ST metal flange (maximum voltage 20V) to protect the diode against ESD-damaging.

Features

- Wavelength λ = 850 nm
- Data rate up to 200Mb/s
- Laser class 1M [note 1]

Applications

- Ethernet
- General applications

Device can differ from picture.
For details and pin out please refer to the drawing

Absolute Maximum Ratings

(T_C = 25°C ± 2°C)

Parameter	Symbol	min.	max.	Unit
Reverse Voltage	V_R		1.5	V
Peak Forward Current (duty cycle < 50%, f> 1MHz)	I_{FRM}		150	mA
Continuous Forward Current	I_F		120	mA
Operating Temperature	$T_{OP} = T_C$	-40	+85	°C
Storage Temperature	T_{stg}	-40	+85	°C
Soldering Temperature / Soldering Time	T_{sold}/ t_{sold}		260/10	°C/s

Optical and Electrical Characteristics

(T_C = 25°C ± 2°C)

Parameter	Symbol	Condition	min.	typ.	Max.	Unit
Fiber Coupled Power	P_{fiber}	fiber: 62.5/125µm GI NA=0.275 fiber: 50/125µm GI NA=0.200 I_F = 100 mA [note2]		150 75		µW
Peak Wavelength	λ_p	I_F = 100 mA	820	850	870	nm
Spectral Width (3dB)	$\Delta\lambda$	I_F = 100 mA		60		nm
Forward Voltage	V_F	I_F = 100 mA		1.8	2.2	V
Rise / Fall Time (10-90%)	t_r / t_f	I_F = 100 mA			4	ns
Band Width	F_C	I_F = 100 mA		175		MHz

Note 1: Operated within the allowed range according to product information
Note 2: Measured at the exit of 100 meters of fiber.

OECA
Handwerkerstraße 13
Phone: +49 (0) 3342 36880
eMail: info@oeca.de

OPTO-ELEKTRONISCHE COMPONENTEN UND APPLIKATIONS GMBH
15366 Hoppegarten
Fax: +49 (0) 3342 3688 88
Internet: www.oeca.de

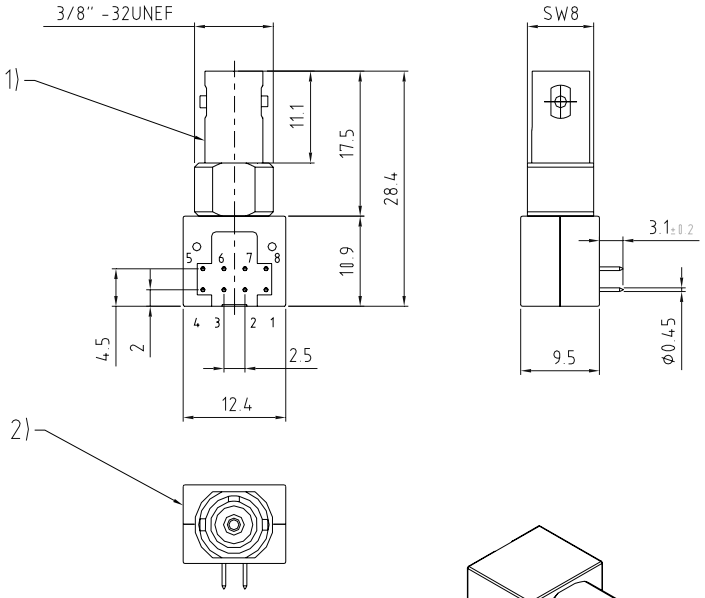
represented by:

DIN EN ISO 9001 : 2008
OECQMISQ20101031231241

HIV
Rosenstraße 1
Phone: +49 (0) 6834 96070
eMail: info@halbleiter-iv.de

HALBLEITER - IMPORT UND VERTRIEBS GMBH
66787 Wadgassen
Fax: +49 (0) 6834 9607 37
Internet: www.halbleiter-iv.de

Drawing



1| ST metal flange acc. to IEC / DIN EN 61754-2
sleeve grade 3
2| housing PA6.6 black

Pinout acc. to specification
tolerances +/-0.1 unless otherwise stated

accessories: dust cap

all dimension in mm

Pin-Out

Pin	LED850-1
1	n.c.
2	Anode
3	Cathode
4	n.c.
5	n.c
6	Anode
7	Anode
8	n.c.

Option: Customer specific pin out upon consultation.

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