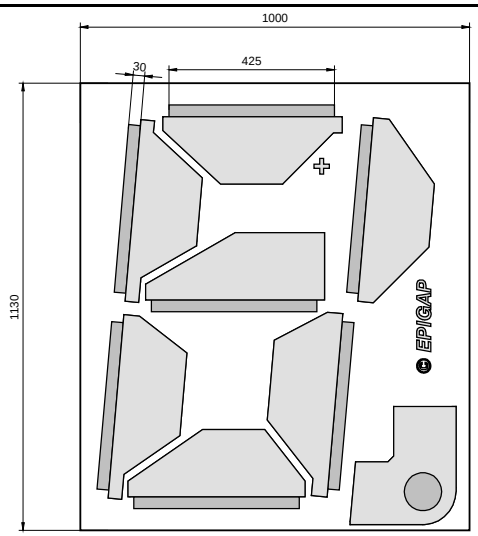
7-Segment LED-Chip EDC-660-19-01

Preliminary 6/22/2007 rev. 05/07

Radiation	Type	Technology	Electrodes
Red	Diffusion type	GaAsP/GaAs	P (anode) up



typ. dimensions (µm)

typ. thickness
330 µm

cathode
Au-alloy metalization

anode
Al metalization

Application

This miniature device is an excellent choice for applications where small size and reduced space are important factors such as complex displays in optical devices for laboratory, measurement, control- and medical equipment.

Miscellaneous Parameters

T_{amb} = 25℃, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Temperature coefficient of λ_C	T_a = -40..120℃	$T_C(\lambda_C)$	0.15	nm/K
Operating temperature range		T_{amb}	-30 to +100	℃
Storage temperature range		T_{stg}	-40 to +125	℃

Optical and Electrical Characteristics

T_{amb} = 25℃, unless otherwise specified

Parameter	Test conditions[1]	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 5 mA	V_F		1.7	1.9	V
Forward voltage	I_F = 20 mA	V_F		1.8	2.1	V
Reverse voltage	I_R = 100 µA	V_R	5			V
Luminous intensity/segment[2]	I_F = 5 mA	I_v	60	85		µcd
Luminous intensity/segment[2]	I_F = 20 mA	I_v	280	400		µcd
Luminous intensity/segment[3]	I_F = 20 mA	I_v		710		µcd
I_V ratio segment to segment[2]	I_F = 20 mA				1.75	
I_V ratio to adjacent chip	I_F = 20 mA				2.00	
Peak wavelength	I_F = 20 mA	λ_p	650	660	670	nm
Spectral bandwidth at 50%	I_F = 20 mA	$\Delta\lambda_{0.5}$		17		nm

[1]Current for one segment

[2]Measured on bare chip on TO-18 header

[3]Measured on epoxy covered chip on TO-18 header

Labeling

Type	Lot N°	I_V(typ) [µcd]	V_F(typ) [V]	Quantity
EDC-660-19-01				

Packing: Chips in wafer pack or on adhesive film with wire-bond side on top

*Note: All measurements carried out with ***EPIGAP*** equipment

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