

# Product Information

## LED Lighting Modules (3.6W / 6.7W Series)

Status: April 2010



### [Applications]

Whatever your lighting application – spot or ambient, indoor or outdoor, stationary or mobile – you can set innovative standards in the general lighting sector with Sharp’s high-performance LED lighting modules marketed as ZENIGATA and MiniZENI. The advantages are obvious – utmost luminescence efficiency, optimum light dispersion, maximum possible lifetime and minimum maintenance for a wide variety of applications:

- General lighting/illumination
- Residential lighting (indoors, outdoors, decorative, functional, emergency, safety)
- Commercial building lighting/illumination, e.g. architectural lighting, spot lighting
- Public lighting/illumination, e.g. street lighting, subway/station lighting, bridge lighting
- Industrial lighting, e.g. factory/storage lighting, warehouse lighting, security lighting

### [Main features]

#### ZENIGATA

- Multiple chip LED with only two terminal connections for ease of installation
- Seven different white tints options in several different binnings
- CRI of up to 94
- Output of up to 280 lm ( $I_f$  360 mA/ $V_f$  10.2 V)/  
540 lm ( $I_f$  640 mA/ $V_f$  10.2 V)
- Power efficiency of up to 80 lm/W
- Dimensions: 18 x 18 mm
- Long lifetime: 40,000 hrs at 80° operating temperature (on package)
- Operating temperature range: -30° to +90° C

#### MiniZENI

- Multiple chip LED with only two terminal connections for ease of installation
- Six different white tints in several different binnings
- CRI of up to 87
- Output of up to 230 lm ( $I_f$  360 mA/ $V_f$  10.2 V)/  
410 lm ( $I_f$  640 mA/ $V_f$  10.2 V)
- Power efficiency of up to 63 lm/W
- Dimensions: 15 x 12 mm
- Long lifetime: 40,000 hrs at 80° operating temperature (on package)
- Operating temperature range: -30° to +90° C

### [Benefits]

#### ZENIGATA

- 18 x 18 mm square module for space-efficient array arrangement
- Thin, lightweight and compact
- Flat surface ensures direct installation on heat sink and excellent thermal dissipation
- Low thermal resistance for efficient thermal management
- Series/parallel matrix LED array ensures fail-safe operation while offering lowest possible thermal radiation

#### MiniZENI

- 15 x 12 mm module
- Thin, lightweight, compact and cost efficient
- Flat surface ensures direct installation on heat sink and excellent thermal dissipation
- Low thermal resistance for efficient thermal management
- Series/parallel matrix LED array ensures fail-safe operation while offering lowest possible thermal radiation

# Colour options/LED lighting module line-up

## ZENIGATA 3.6W Series



Model number	LED colour	Colour temp. [K]	Colour range coordinates (CIE 1931)		Luminous flux [lm]	CRI (typ.) [Ra]	Luminescence efficiency [lm/W]
			X	Y			
GW5BQC15L02 <b>NEW</b>	Warm white	2,700	0.458	0.410	160	85	44
GW5BDC15L02	Warm white	2,800	0.452	0.409	200	70	54
GW5BTC15L02 <b>NEW</b>	Warm white	3,000	0.434	0.403	190	85	52
GW5BRC15L02 <b>NEW</b>	Natural white	4,000	0.382	0.380	180	94	49
GW5BWC15L02	Pure white	5,000	0.345	0.351	280	60	76
GW5BNC15L02	Pure white	5,000	0.345	0.351	190	90	52
GW5BNC15L12	Cool white	6,500	0.316	0.324	190	90	52

## MiniZENI 3.6W Series **NEW**



Model number	LED colour	Colour temp. [K]	Colour range coordinates (CIE 1931)		Luminous flux [lm]	CRI [Ra]		Luminescence efficiency [lm/W]
			X	Y		Min.	Typ.	
GW5BTC27K00	Warm white	2,700	0.464	0.418	200	83	87	54
GW5BTC30K00	Warm white	3,000	0.435	0.403	210	83	87	57
GW5BTC35K00	Natural white	3,500	0.409	0.393	220	83	87	60
GW5BTC40KH0	Natural white	4,000	0.376	0.371	220	83	87	60
GW5BTC50K00	Pure white	5,000	0.346	0.360	230	83	87	63
GW5BTC65K00	Cool white	6,500	0.313	0.332	230	83	87	63

## ZENIGATA 6.7W Series



Model number	LED colour	Colour temp. [K]	Colour range coordinates (CIE 1931)		Luminous flux [lm]	CRI (typ.) [Ra]	Luminescence efficiency [lm/W]
			X	Y			
GW5BQF15L0B <b>NEW</b>	Warm white	2,700	0.458	0.410	300	85	45
GW5BDF15L00	Warm white	2,800	0.452	0.409	400	70	60
GW5BTF15L0B <b>NEW</b>	Warm white	3,000	0.434	0.403	360	85	54
GW5BRF15L0B <b>NEW</b>	Natural white	4,000	0.382	0.380	340	94	51
GW5BWF15L00	Pure white	5,000	0.345	0.351	540	60	80
GW5BNF15L00	Pure white	5,000	0.345	0.351	350	90	52
GW5BNF15L10	Cool white	6,500	0.316	0.324	350	90	52

## MiniZENI 6.7W Series **NEW**



Model number	LED colour	Colour temp. [K]	Colour range coordinates (CIE 1931)		Luminous flux [lm]	CRI [Ra]		Luminescence efficiency [lm/W]
			X	Y		Min.	Typ.	
GW5BTF27K00	Warm white	2,700	0.464	0.418	355	83	87	54
GW5BTF30K00	Warm white	3,000	0.435	0.403	375	83	87	57
GW5BTF35K00	Natural white	3,500	0.409	0.393	390	83	87	60
GW5BTF40KH0	Natural white	4,000	0.376	0.371	390	83	87	60
GW5BTF50K00	Pure white	5,000	0.346	0.360	410	83	87	63
GW5BTF65K00	Cool white	6,500	0.313	0.332	410	83	87	63

# SHARP

Subject to alterations and modifications.  
For complete product information please refer to the product specifications.

Sharp Microelectronics Europe a division of Sharp Electronics (Europe) GmbH  
Sonninstraße 3 | 20097 Hamburg | Germany | Tel.: +49-18 05-07 35 07 | Fax: +49-40-23 76 22 32 | [www.sharpsme.com](http://www.sharpsme.com)

\*Calls cost € 0.14 per minute from German landlines and no more than € 0.42 per minute from the German mobile network.