

# LED Energy Smart™ Capsules G4 and G9

For Halogen replacement



DATA SHEET

## Product information

Tungsramp introduces the new LED Energy Smart™ Capsules to replace your Halogen Capsules with our energy efficient, high performance LED Technology solution.

## Features & benefits

- Wide 240° beam angle
- Long life time 15 000 hours
- Warm white 2700K for decorative purpose
- 100% retro-fit
- A++ Energy Efficiency Class
- Warranty: 2 years with maximum 8 000 burning hours according to the Tungsramp Standard Warranty conditions

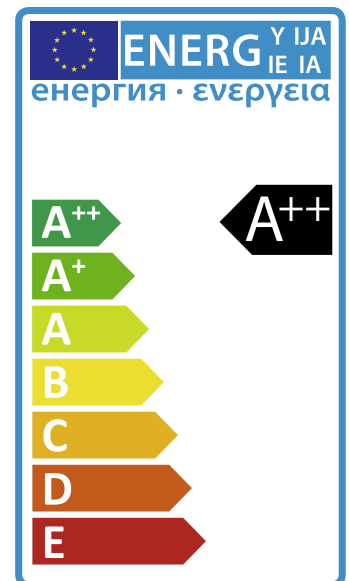
## Application areas



Hospitality



Household



## IEC Standards

EN 55015:	Limits and methods of measurement of radio disturbance characteristics of electrical lighting
EN 61547:	Equipment for general lighting purposed EMC immunity requirements
EN 61000-3-3:	Limitation of voltage fluctuations and flicker in low voltage supply systems (equipment rated current $\leq 16$ A)
EN 61000-3-2:	Limits - Limits for harmonic current emissions (equipment input $\leq 16$ A per phase)
IEC 62471:	Photo biological safety of lamps and lamp systems
EN 62560:	Self-ballasted lamps for general lighting services by voltage $> 50$ V - safety specification
EN 62493:	Assessment of lighting equipment related to human exposure to electromagnetic fields

## Specification summary

Product Code	Product Description	Nominal/ Rated Power (W)	Nominal Lamp Voltage (V)	Cap/ Base	Nominal/ Rated Lumens (lm)	Nominal beam angle (°)	Nominal/ Rated Life (L70/B50 hours)	CCT (K)	CRI	Rated efficacy (lm/w)	WEC (kwh/1000h)	EEC	Pack Qty
93110793	LED1.6/G4/827/12V/BL 1/10 TU	1.6	12	G4	150	240	15 000	2700	80	93.75	1.6	A++	1/10
93110794	LED2.5/G9/827/220-240V/BL 1/10 TU	2.5	220-240	G9	200	240	15 000	2700	80	80	2.5	A++	1/10

## Common attributes

- Colour Rendering Index > 80
- Warm up time: Instant on
- Switching Cycles: 30,000
- Power factor: >0.5
- Ambient temperature range -20° C to +40°C.
- Line Freq: 50/60Hz
- Color consistency < 6 SDCM

## Operation and maintenance

- Store and use the lamps the same way as traditional lamps.
- Check your fixtures are properly wired and don't deliver voltage spike to lamps causing overheating/failure.
- Ambient temperature range -20° C to 40°C
- Lamps should be kept free from contamination.
- Good condition of the lamp-holder contacts is important to ensure proper operation of lamp.
- Ensure lamp is cool before removing.
- Switch off mains supply before installing/removing lamp.
- Not for use in totally enclosed recessed fixtures.

## Recommended operation temperature

Max application Temperature: 50°C

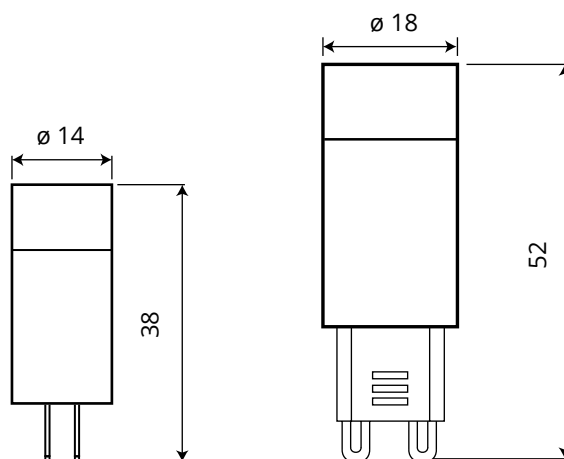
Thermal test point



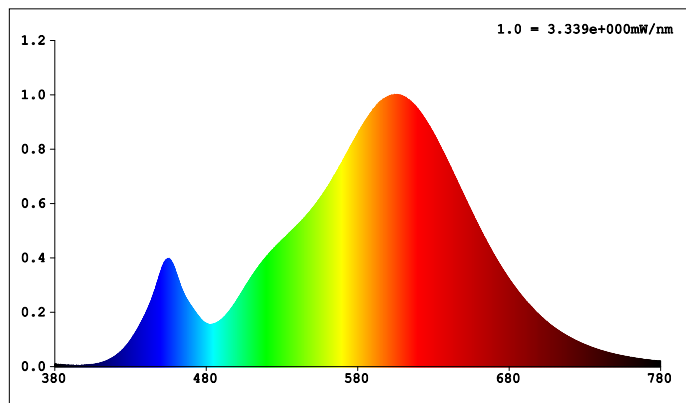
## Packaging image



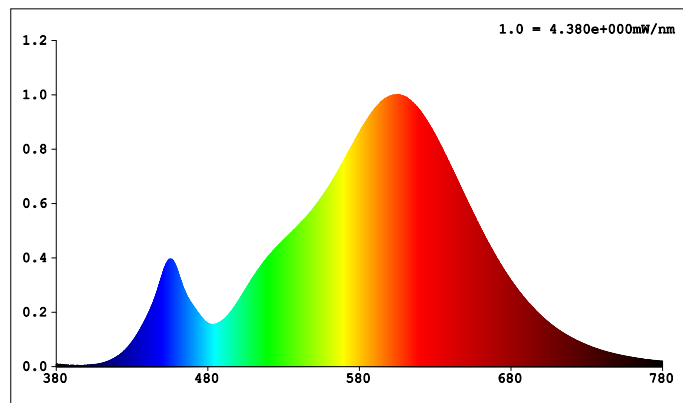
## Dimensions (mm)



# Spectral distributions



G4 1.6W 2700K



G9 2.5W 2700K

All values from 180-400nm are 0