

МОЩНЫЙ СВЕТОДИОД ARPL-STAR-3W-EPL42 RED



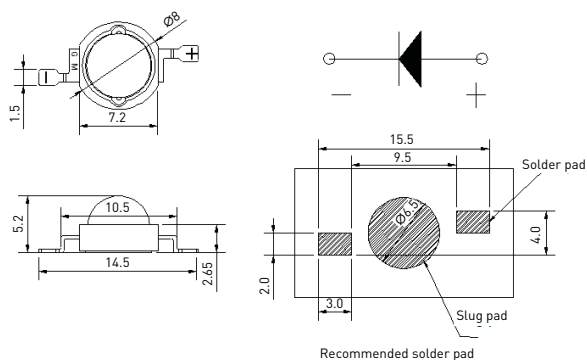
FEATURES

- Low voltage operation.
- Instant light.
- Long operating life.

APPLICATIONS

- Outdoor lighting (street lamp, underwater lamp, underground lamp, wall washer lamp, stage lamp, plant lamp).
- Indoor lighting (lamp, sky lantern, wall lamp, tube lamp, track lamp, corridor lamp).

PACKAGE DIMENSIONS



Note: all dimensions in mm tolerance is ±0.1mm unless otherwise noted.

PARAMETERS

ABSOLUTE MAXIMUM RATING (AT $T_A = +25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
DC Forward Current	I_F	700	mA
Peak Pulse Current*	I_{FP}	1000	mA
Reverse Voltage	V_R	5	V
Power Dissipation (250 eter)	P_D	3	W
Operating Temperature Range	T_{OPR}	-30... +75	°C
Storage Temperature Range	T_{STG}	-40... +85	°C
LED Junction Temperature	T_J	125	°C

* 1/10 Duty Cycle, 0.1ms Pulse Width.

ELECTRO-OPTICAL CHARACTERISTICS — WHITE (AT $T_A = +25^\circ\text{C}$)

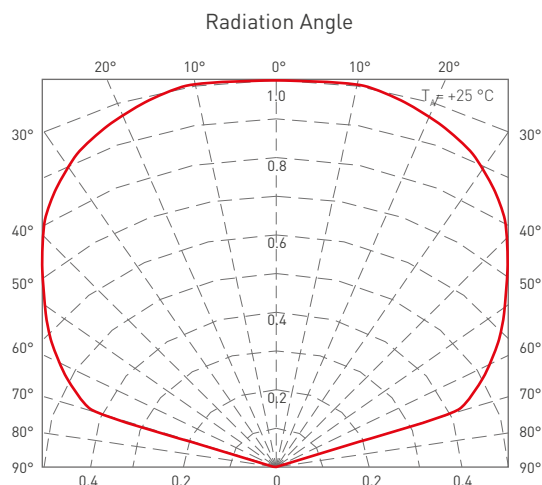
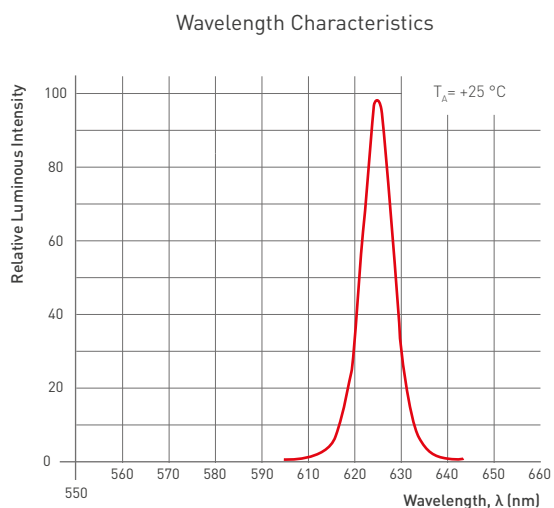
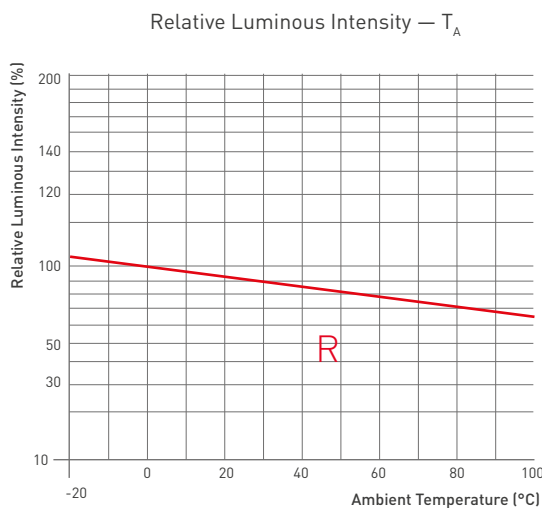
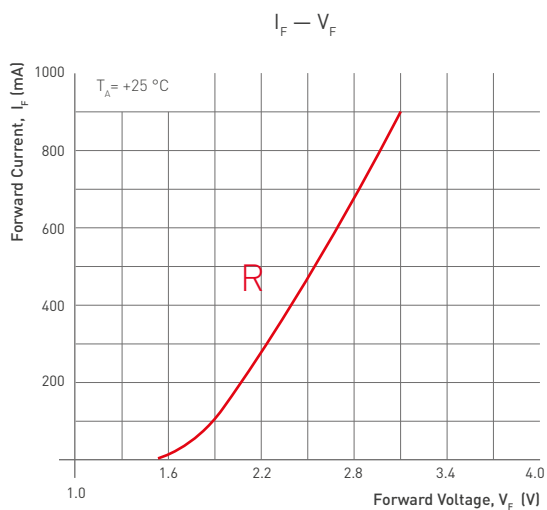
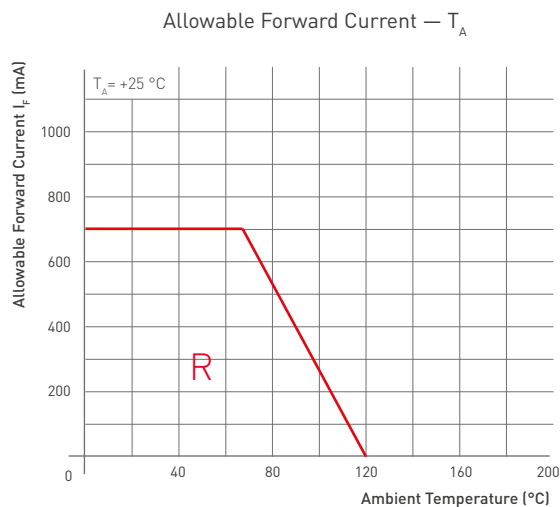
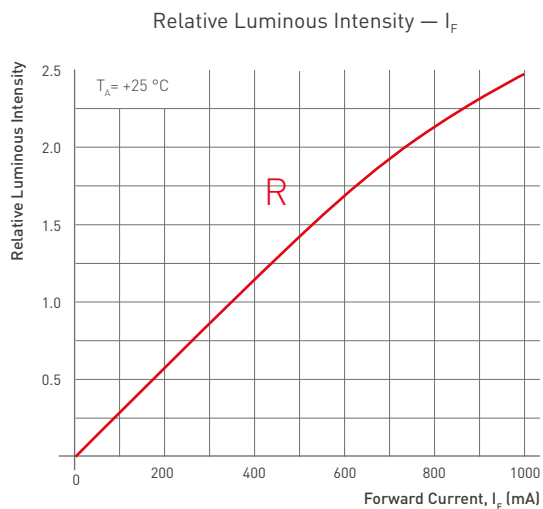
Parameter	Symbol	Min.	Avg.	Max.	Units	Conditions
Forward Voltage	V_F	2.2	—	2.5	V	$I_F=700\text{mA}$
Thermal Resistance Junction To Board	$R\theta_{J-B}$	—	8	—	°C/W	$I_F=700\text{mA}$
Luminous Flux	Φ_V	100	—	120	lm	$I_F=700\text{mA}$
Dominant Wavelength	λ_d	620	—	630	nm	$I_F=700\text{mA}$
Temperature Coefficient of Forward Voltage	$\Delta V_F/\Delta T$	—	-2	—	mV/°C	$I_F=700\text{mA}$
Reverse Current	I_R	—	—	10	μA	$V_R=5\text{V}$
Viewing Angle ^[1]	$2\theta_{1/2}$	—	140	—	Deg	$I_F=700\text{mA}$

Notes:

1. $2\theta_{1/2}$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. The above luminous flux measurement allowance tolerance is ±10%.
3. The above forward voltage measurement allowance tolerance is ±0.1V.
4. The wavelength measurement error shown above is ±0.1nm.

TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

($T_A = +25\text{ }^\circ\text{C}$, Unless Otherwise Noted)

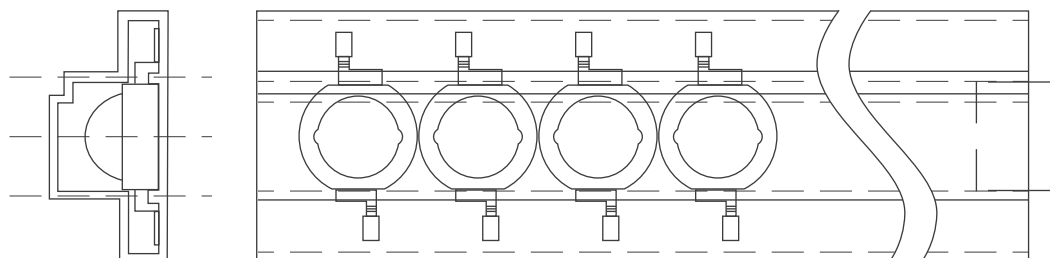


RELIABILITY TEST STANDARDS

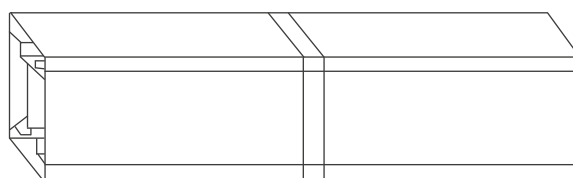
Test Item	REF. Standard	Test condition	Duration	Sample count	Accept
Temperature cycle	JESD22-A104-A	-40... +25... +100... +25 °C 30 min, 5 min, 30 min, 5 min	100 cycles	22	0/22
High temperature storage	JEITA ED-4701 200 201	Ta=100±5 °C	1000 hrs	22	0/22
Low temperature storage	JEITA ED-4701 200 202	Ta=-40±5 °C	1000 hrs	22	0/22
Humidity heat storage	JIS C 7021 (1977) B-11	Ta=60 °C RH=85%	1000 hrs	22	0/22
Life test	JESD22-A108-A	Ta=25 °C IF=700mA	1000 hrs	22	0/22
High humidity heat life test	JESD22-A101	Ta=60 °C RH=85% IF=700mA	1000 hrs	22	0/22
Resistance to soldering heat	JESD22-A113	IR soldering 245 °C/10sec	1 time	22	0/22

PACKING STANDARD

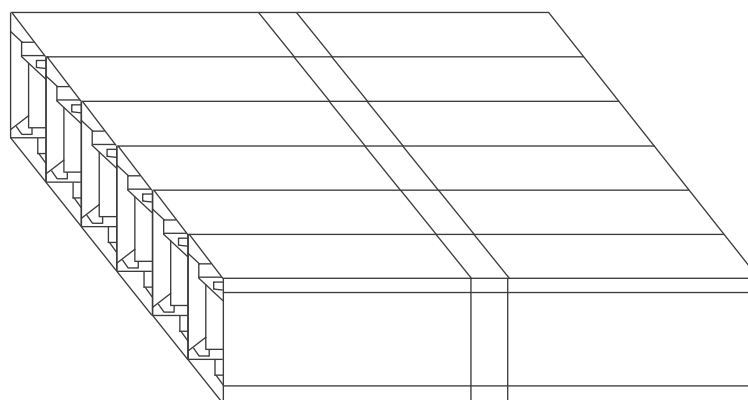
Normal packing weight: 0.041 kg/each tube, 0.877 kg/1K



50 pcs/tube



4 tubes



20 tubes