27 × 27mm light bar

◆Features:

Emitting area : 27 × 27mm
High efficiency, low power consumption.
Excellent characters appearance.
Solid state reliability.
Categorized for luminous intensity.

◆Descriptions:

The JYBD2727SA2 have uniform emitting light.
These devices are made with white segments and white surface.

◆Application

Instrument panels.
Digital read out display.

◆ Absolute Maximum Rating （Ta=25℃） (JYBD2727SA2)

Parameter	Symbol	Super Red	Green	Yellow	Unit
Power Dissipation	Pd	100	120	120	mW
Peak Forward Current (Duty 1/10@ 1KHz)	IFP	60	60	60	mA
Continuous Forward Current /Segment	IF	20	20	20	mA
Recommend use current /Segment	IF	5～10	5～10	5～10	mA
Reverse Voltage	VR	8	8	8	℃
Operating Temperature Range	Topr	-25~ +75			℃
Storage Temperature Range	Tstg	-30 ~ +85			℃
Solder Temperature ③	Tsol	260±5			℃

Notes: Soldering time ≤ 5 seconds.

◆Electrical Optical Characteristics（Ta=25℃） (JYBD2727SA2)

Parameter	Symbol	Super Red		Green		Yellow		Unit	Test Condition
		Typ.	Max	Typ.	Max	Typ.	Max		
Luminous Intensity	IV	5.0	--	2.5	--	2.5	--	mcd	IF=10mA
Forward Voltage	VF	3.7	4.6	4.4	5.0	4.0	5.0	V	IF=20mA
Reverse Current	IR	--	50	--	50	--	50	uA	VR=5V
Dominant Wavelength	λd	645	--	565	--	585	--	nm	IF=20mA
Spectral Line Half Width	Δλ	30	--	30	--	30	--	nm	IF=20mA

◆ Absolute Maximum Rating （Ta=25℃） (JYBD2727SA4)

Parameter	Symbol	Super Red	Green	Yellow	Unit
Power Dissipation	Pd	100	120	120	mW
Peak Forward Current (Duty 1/10@ 1KHz)	IFP	120	120	120	mA
Continuous Forward Current /Segment	IF	40	40	40	mA
Recommend use current /Segment	IF	10～20	10～20	10～20	mA
Reverse Voltage	VR	8	8	8	℃
Operating Temperature Range	Topr	-25~ +75			℃
Storage Temperature Range	Tstg	-30 ~ +85			℃
Solder Temperature ③	Tsol	260±5			℃

Notes: Soldering time ≤ 5 seconds.

◆Electrical Optical Characteristics（Ta=25℃） (JYBD2727SA4)

Parameter	Symbol	Super Red		Green		Yellow		Unit	Test Condition
		Typ.	Max	Typ.	Max	Typ.	Max		
Luminous Intensity	IV	10	--	5.0	--	5.0	--	mcd	IF=10mA
Forward Voltage	VF	3.7	4.6	4.4	5.0	4.0	5.0	V	IF=20mA
Reverse Current	IR	--	50	--	50	--	50	uA	VR=5V
Dominant Wavelength	λd	645	--	565	--	585	--	nm	IF=20mA
Spectral Line Half Width	Δλ	30	--	30	--	30	--	nm	IF=20mA

◆ Absolute Maximum Rating （Ta=25℃） (JYBD2727SC4)

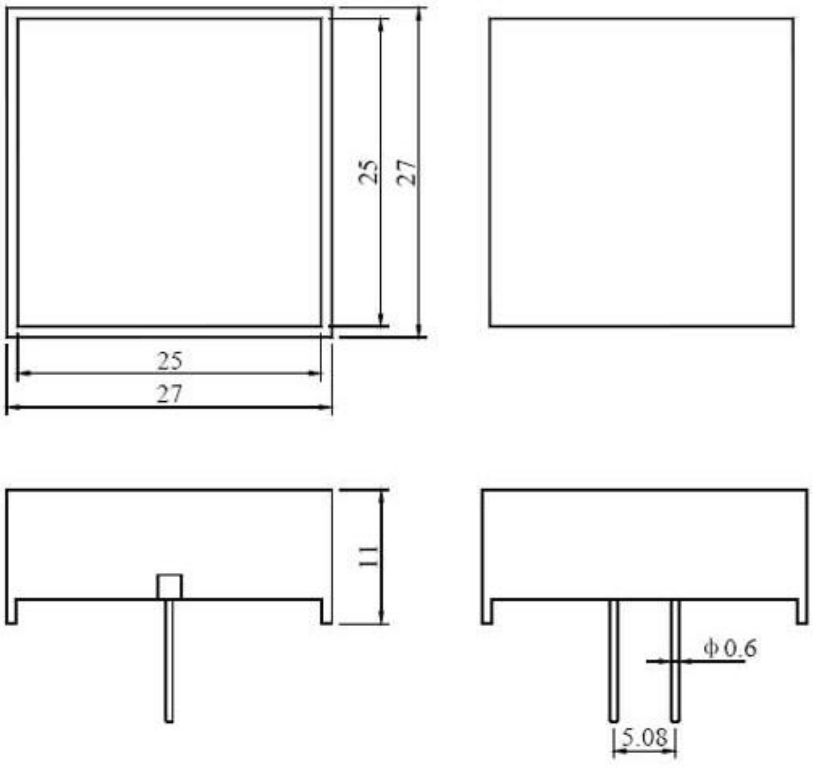
Parameter	Symbol	Super Red	Green	Yellow	Unit
Power Dissipation	Pd	190	220	220	mW
Peak Forward Current (Duty 1/10@ 1KHz)	IFP	200	200	200	mA
Continuous Forward Current /Segment	IF	80	80	80	mA
Recommend use current /Segment	IF	30～40	30～40	30～40	mA
Reverse Voltage	VR	5	5	5	℃
Operating Temperature Range	Topr	-25~ +75			℃
Storage Temperature Range	Tstg	-30 ~ +85			℃
Solder Temperature ③	Tsol	260±5			℃

Notes: Soldering time ≤ 5 seconds.

◆Electrical Optical Characteristics（Ta=25℃） (JYBD2727SC4)

Parameter	Symbol	Super Red		Green		Yellow		Unit	Test Condition
		Typ.	Max	Typ.	Max	Typ.	Max		
Luminous Intensity	IV	10	--	5.0	--	5.0	--	mcd	IF=10mA
Forward Voltage	VF	1.85	2.3	2.2	2.5	2.0	2.0	V	IF=20mA
Reverse Current	IR	--	50	--	50	--	50	uA	VR=5V
Dominant Wavelength	λd	645	--	565	--	585	--	nm	IF=20mA
Spectral Line Half Width	Δλ	30	--	30	--	30	--	nm	IF=20mA

◆ Package Dimensions:



NOTES：

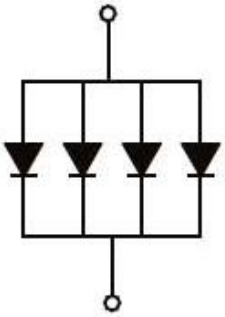
All dimensions are in millimetres (mm), Tolerance is ±0.25mm unless otherwise noted.

Specifications are subject to change without notice.

◆ Internal Circuit

JYBD2727SA2

JYBD2727SA4



JYBD2727SC4