



DOT[®]

Tiny Aperture LED Luminaires

Specifications

Note: Specification data is per-fixture



General Specifications:

Color	Pure White	Color Temperature	6400 K
Continuous Forward Current	3x20	Forward Voltage	3.2V
Operating Temperature	-20- +80	Millicandela	6000mcd
Power Dissipation	3x120	Peak Forward Current	3x100
Storage Temperature	-40- +85	Reverse Voltage	5
Wattage Consumption	0.192 Watts	Viewing Angle	120 degree

Part Number: 5050-PW6000					
absolute maximum ratings: (TA=25°C)					
PARAMETER	SYMBOL	RATING	UNIT		
Power Dissipation	PD	3x120	mW		
Continuous Forward Current	IF	3x20	mA		
Peak Forward Current (1/10th duty cycle, 0.1ms pulse width)	IFP	3x100	mA		
Reverse Voltage	VR	5.0	V		
Operating Temperature	TA	-20-80	°C		
Storage Temperature	TSTG	-40-85	°C		
Lead Soldering Temperature (3mm from body) 260C (for 5 seconds)					
optoelectric characteristics:					
PARAMETER	SYMBOL	MAX	TYP	UNIT	TEST
View Angle of Half Power	$2\theta_{1/2}$		120	Degree	
Forward Voltage	VF	3.4	3.2	V	IF=3x20mA
Dominant Wavelength	λ_D		Pure White	nm	
Luminous Intensity	IV		6000	mcd	IF=3x20mA

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=3X20mA$	3.0	3.2	3.4	V
Luminous Intensity	I_v	$I_F=3X20mA$	5000	6000	7000	mcd
Reverse Current	I_R	$V_R=5V$	-		10	μA
Dominant Wavelength	λ_D	$I_F=3X20mA$		Pure White		nm
Color Temperature	CCT	$I_F=3X20mA$	5500		7500	K
Viewing Angle	$2\theta_{1/2}$	$I_F=3X20mA$		120		deg

Absolute Maximum Rating

Parameter	Symbol	Rating	Unit
Power Dissipation	P_d	3X120	mW
Forward Current	I_F	3X20	mA
Peak Forward Current*1	I_{FP}	3X100	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{opr}	-20~80	°C
Storage Temperature Range	T_{stg}	-40~85	°C
Soldering Temperature	T_{sol}	260 (for 5 seconds)	°C

Electro-Optical Characteristics Curves - Pure White
(subject to change, with external lensing)

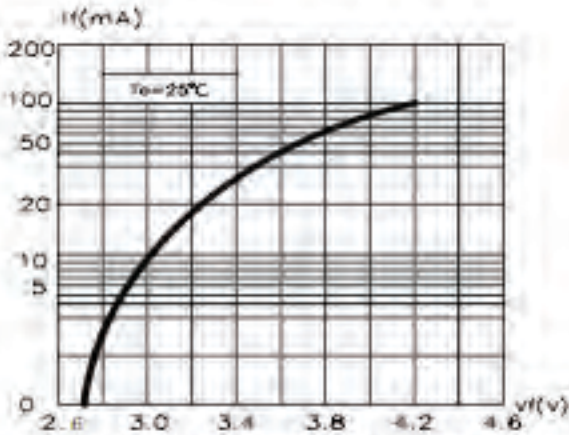


Fig.1 Forward Current vs. Forward Voltage

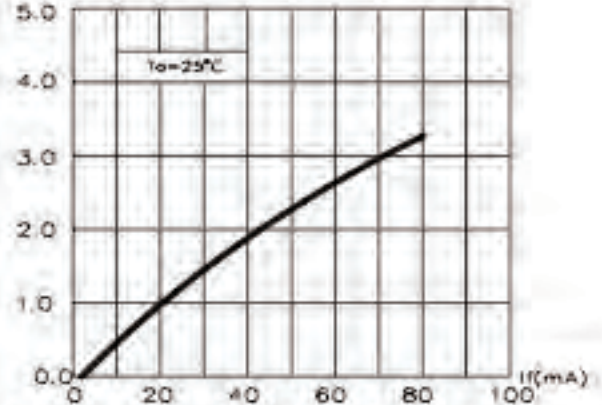


Fig.2 Relative Luminous Intensity vs. Forward Current

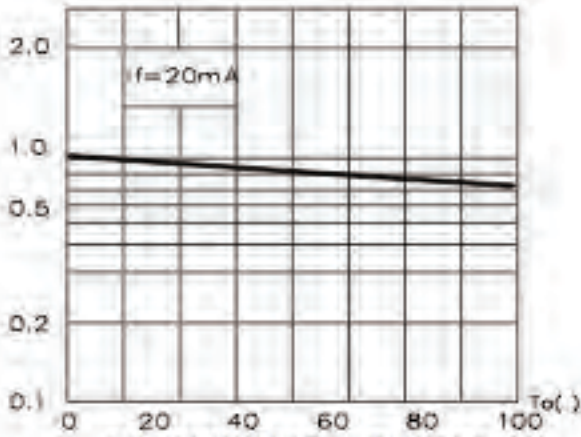


Fig.3 Relative Luminous Intensity vs. Ambient Temperature

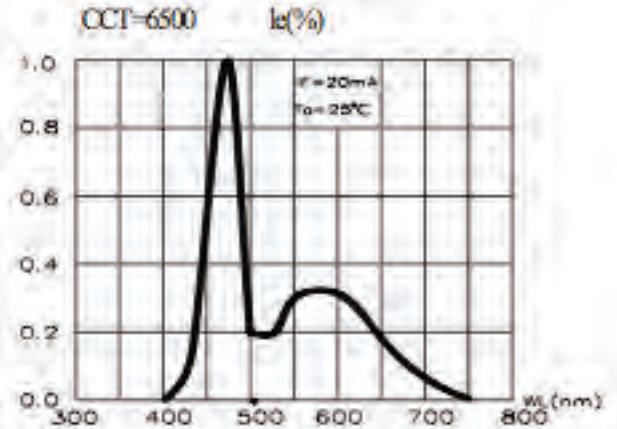


Fig.4 Intensity Vs. Wavelength

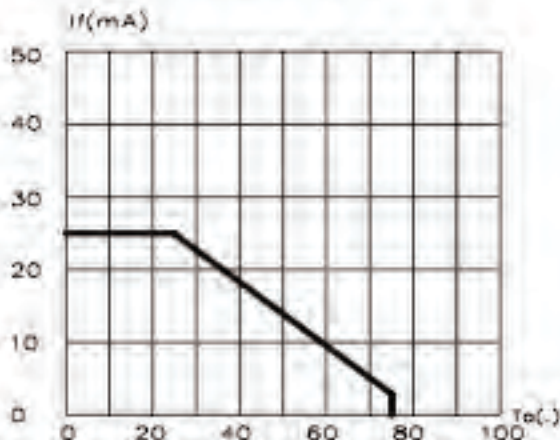


Fig.5 Maximum Forward Current vs. Ambient Temperature

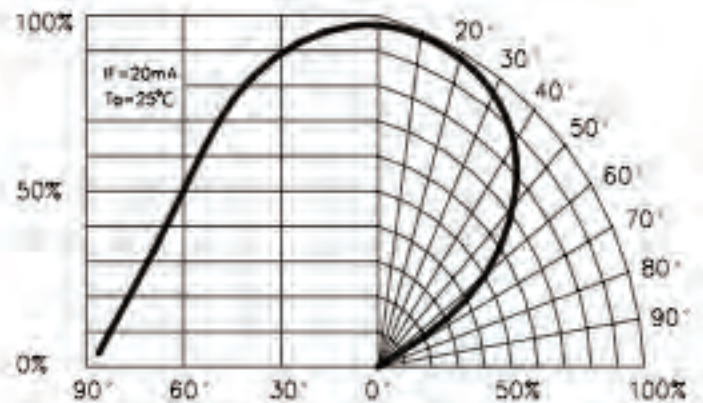


Fig.6 Relative Luminous Intensity vs. Radiation Angle

General Specifications

Color	Warm White	Color Temperature	2850 K
Continuous Forward Current	3x20	Forward Voltage	3.2V
Millicandela	6000mcd	Lumen	19 Lumen
Peak Forward Current	3x100	Operating Temperature	-20-+80
Reverse Voltage	5	Power Dissipation	3x120
Viewing Angle	120 degree (without external lensing)	Storage Temperature	-40-+85
		Wattage Consumption	0.192 Watts

absolute maximum ratings: (TA=25°C)

PARAMETER	SYMBOL	RATING	UNIT
Power Dissipation	PD	3x120	mW
Continuous Forward Current	IF	3x20	mA
Peak Forward Current (1/10th duty cycle, 0.1ms pulse width)	IFP	3x100	mA
Reverse Voltage	VR	5.0	V
Operating Temperature	TA	-20-80	°C
Storage Temperature	TSTG	-40-85	°C
Lead Soldering Temperature (3mm from body) 260C (for 5 seconds)			

optoelectronic characteristics:

PARAMETER	SYMBOL	MAX	TYP	UNIT	TEST
View Angle of Half Power (without external lensing)	2θ _{1/2}		120	Degree	
Forward Voltage	VF	3.4	3.2	V	IF=3x20mA
Dominant Wavelength	λ _D		Warm White	nm	
Luminous Intensity	IV		6000	mcd	IF=3x20mA

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =3X20mA	3.0	3.2	3.4	V
Luminous Intensity	I _V	I _F =3X20mA	5000	6000	7000	mcd
Reverse Current	I _R	V _R =5V			10	μA
Dominant Wavelength	λ _D	I _F =3X20mA		Warm White		nm
Color Temperature	CCT	I _F =3X20mA	2700		3500	K
Viewing Angle	2θ _{1/2}	I _F =3X20mA		120		deg

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Power Dissipation	P _d	3X120	mW
Forward Current	I _F	3X20	mA
Peak Forward Current*1	I _{FP}	3X100	mA
Reverse Voltage	V _R	5	V
Operating Temperature Range	T _{opr}	-20~80	°C
Storage Temperature Range	T _{stg}	-40~85	°C
Soldering Temperature	T _{sst}	260 (for 5 seconds)	°C

Electro-Optical Characteristics Curves - Warm White
(subject to change, with external lensing)

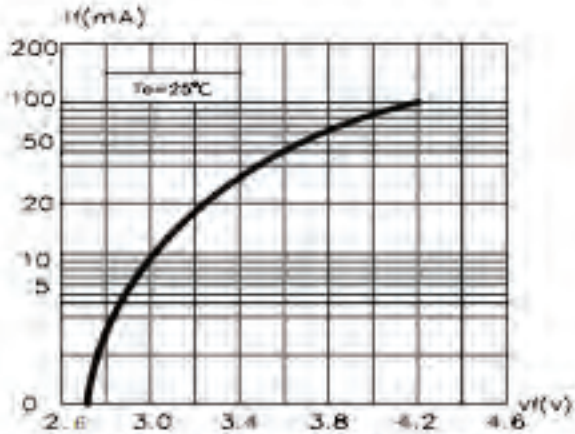


Fig.1 Forward Current vs. Forward Voltage

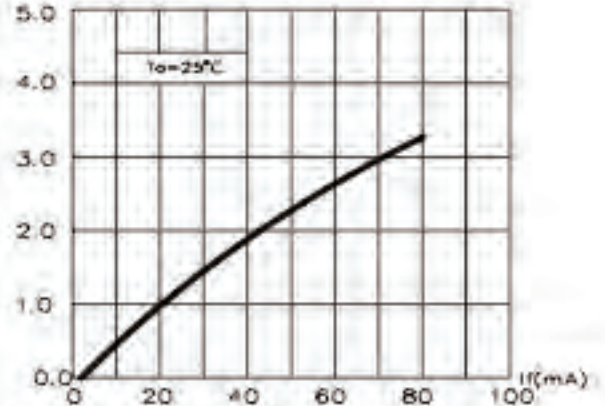


Fig.2 Relative Luminous Intensity vs. Forward Current

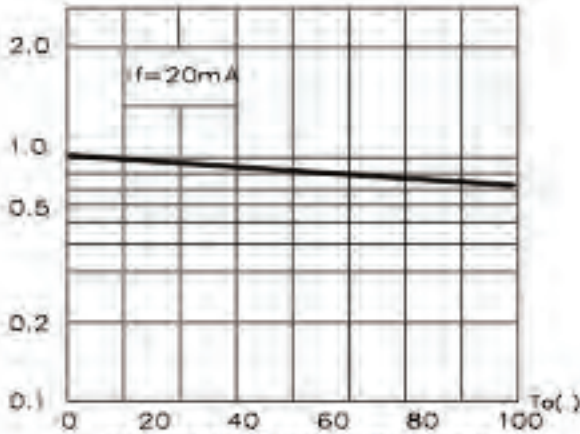


Fig.3 Relative Luminous Intensity vs. Ambient Temperature

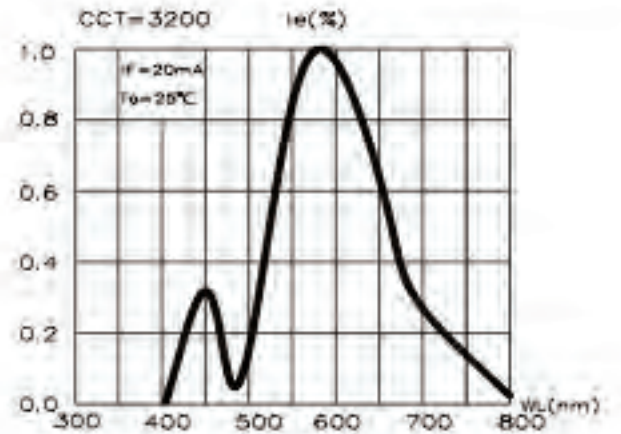


Fig.4 Intensity Vs. Wavelength.

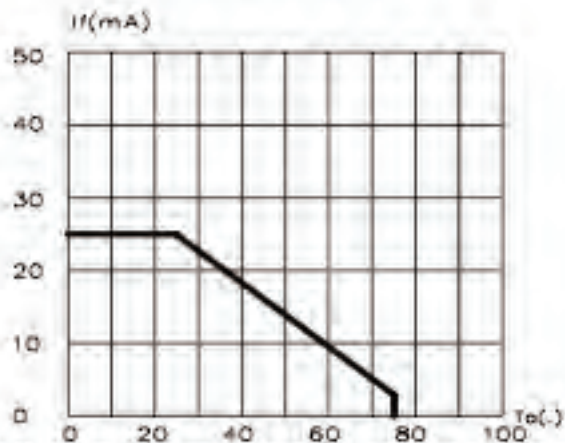


Fig.5 Maximum Forward Current vs. Ambient Temperature

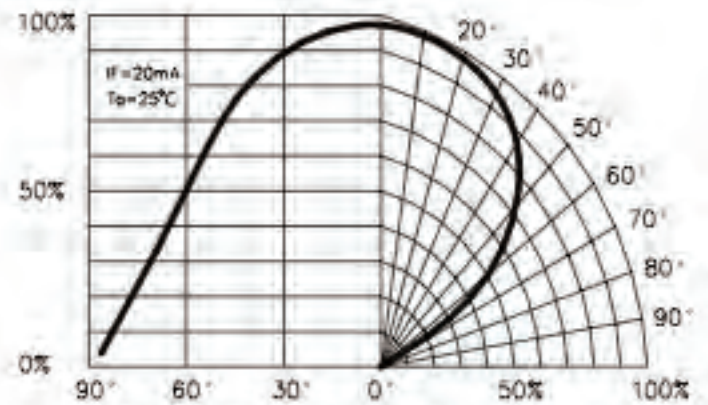


Fig.6 Relative Luminous Intensity vs. Radiation Angle