

PRODUCT:

5MM THROUGH-HOLE LED

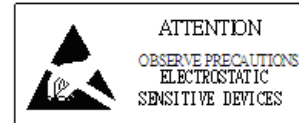
FEATURES:

Standard 5 mm LED package
 Various emission angles available
 93 Ra (min)



DESCRIPTION

YUJILEDS™ high CRI 5 mm LED provides the industry's highest CRI values in a traditional LED form factor.



ELECTRICAL-OPTICAL CHARACTERISTICS (T _A = 25 °C)							
PARAMETER	SYMBOL	VALUE			UNIT	TOLERANCE	CONDITION
		MIN.	TYP.	MAX.			
Forward voltage	V _f	2.7	--	3.1	V	±0.05	I _r = 20mA
Luminous flux	Φ _{3200K}	6.1	--	7.5	lm	--	I _r = 20mA
	Φ _{5600K}	6.6		8.0			
Correlated color temperature	CCT _{3200K}	3050	3200	3350	K	--	I _r = 20mA
	CCT _{5600K}	5300	5600	5900			
Color rendering index	Ra	93	--	--	--	±1	I _r = 20mA
TCS R9 (CRI Red)	R9	--	60	--	--	--	I _r = 20mA
Chromaticity coordinates	(X,Y)	--	--	--	--	±0.005	--
Reverse current	I _r	--	--	10	μA	±0.1	V _r = 5V
Viewing angle	2θ1/2	--	30	--	Deg	±5	I _r = 20mA
		--	45	--			
		--	60	--			

ORDERING INFORMATION			
PART NUMBER	CCT	CHROMATICITY BINS	VOLTAGE RANGE
YJ-BC-F5-G01-32	3200K ± 150K	F4-2, F7-2, F5-1, F8-1	0.1 V
YJ-BC-F5-G01-56	5600K ± 300K	B8-2, B10-2, C3-1, C5-1	0.1 V
YJ-BC-F5-G01-XX	CUSTOM		

VOLTAGE BIN CODES				
Bin	V27	V28	V29	V30
V _F	2.7-2.8	2.8-2.9	2.9-3.0	3.0-3.1

ABSOLUTE MAXIMUM RATING (T _A = 25 °C)			
PARAMETER	SYMBOL	LIMIT	UNIT
Power Consumption	P _D	88	mW
DC Forward Current (pulsed)*	I _{Fp}	45**	mA
DC Forward Current	I _F	30	mA
Reverse Voltage	V _R	5	V
Solder Point Temperature***	T _s	70	°C
Operating Temperature	T _{opr}	-45 ~ +85	°C
Storage Temperature	T _{stg}	-45 ~ +100	°C

* Pulse width ≤ 0.1ms, Duty ≤ 1/10.

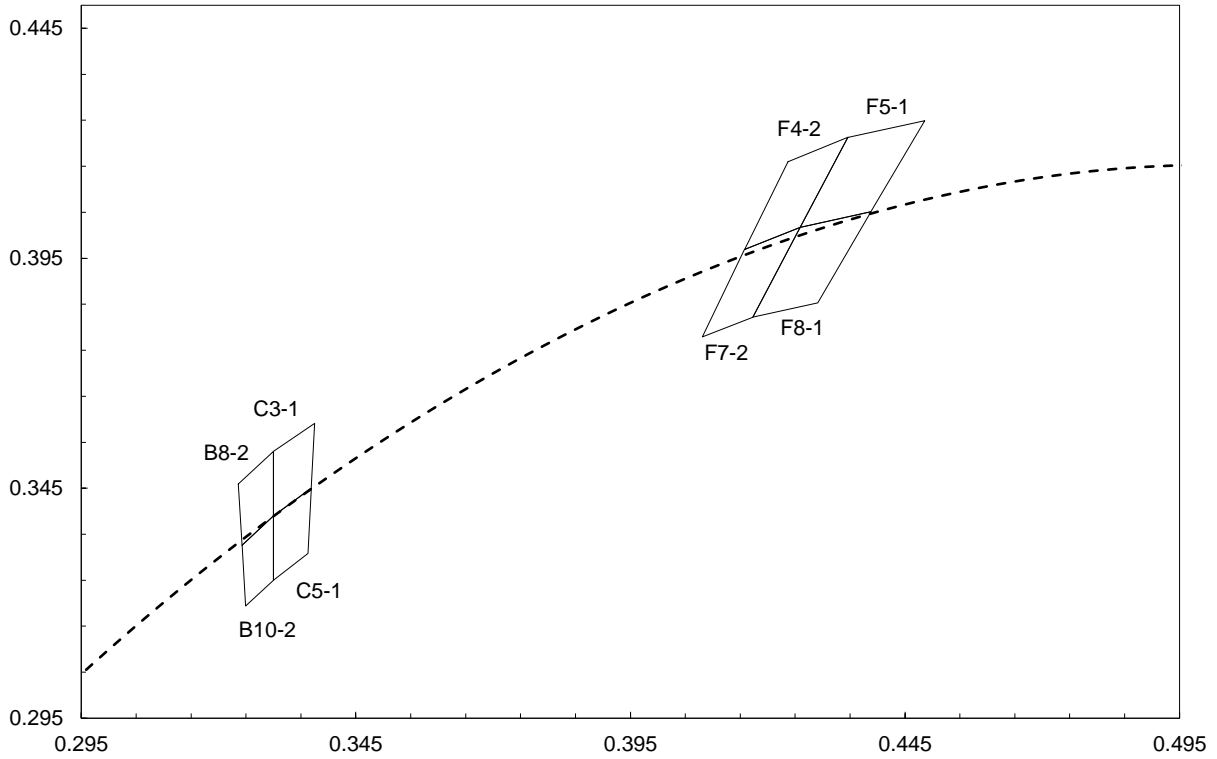
** Theoretical data.

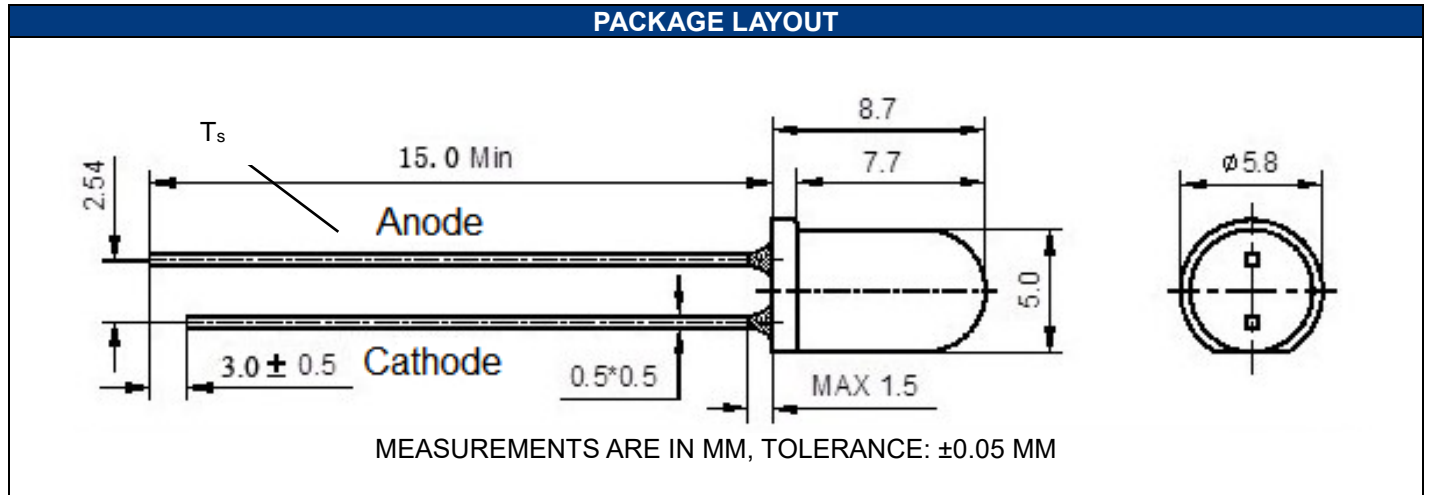
*** See page 4 for solder point definition.

CHROMATICITY BINS & COORDINATES									
CCT	BIN	CIE 1931 COORDINATES							
		X0	Y0	X1	Y1	X2	Y2	X3	Y3
5600K	B8-2	0.3236	0.3459	0.3243	0.3326	0.3300	0.3390	0.3300	0.3530
	B10-2	0.3243	0.3326	0.3249	0.3194	0.3300	0.3250	0.3300	0.3390
	C3-1	0.3300	0.3530	0.3300	0.3390	0.3369	0.3450	0.3375	0.3591
	C5-1	0.3300	0.3390	0.3300	0.3250	0.3363	0.3308	0.3369	0.3450
3200K	F4-2	0.4237	0.4160	0.4158	0.3969	0.4259	0.4017	0.4346	0.4213
	F7-2	0.4158	0.3969	0.4081	0.3779	0.4173	0.3822	0.4259	0.4017
	F5-1	0.4346	0.4213	0.4259	0.4017	0.4388	0.4051	0.4486	0.4249
	F8-1	0.4259	0.4017	0.4173	0.3822	0.4291	0.3853	0.4388	0.4051

CHROMATICITY BINS & COORDINATES

CIE 1931 COORDINATES



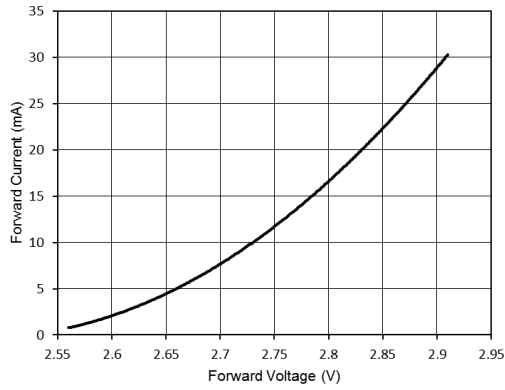


PACKAGE MATERIALS	
ITEM	DESCRIPTION
DIE MATERIAL	InGaN
ENCAPSULANT RESIN MATERIAL	EPOXY RESIN
ELECTRODES MATERIAL	IRON

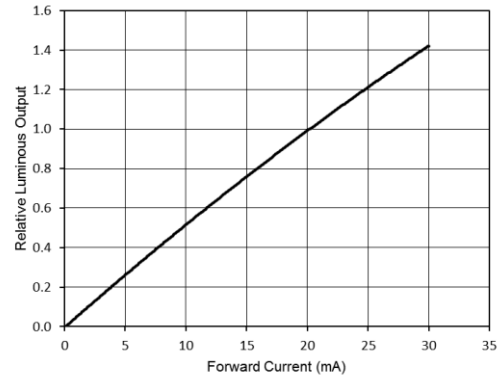
CHARACTERISTIC CURVES

ALL CHARACTERISTIC CURVES ARE FOR REFERENCE ONLY AND NOT GUARANTEED

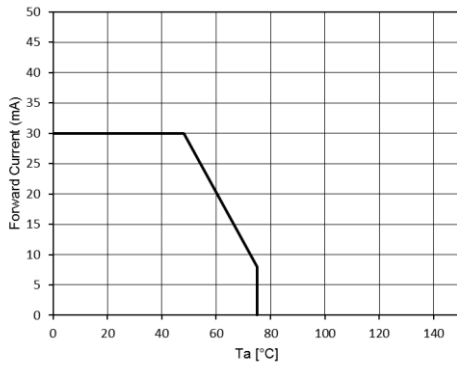
FORWARD CURRENT VS FORWARD VOLTAGE (T_A = 25°C)



FORWARD CURRENT VS RELATIVE LUMINOUS OUTPUT (T_A = 25°C)

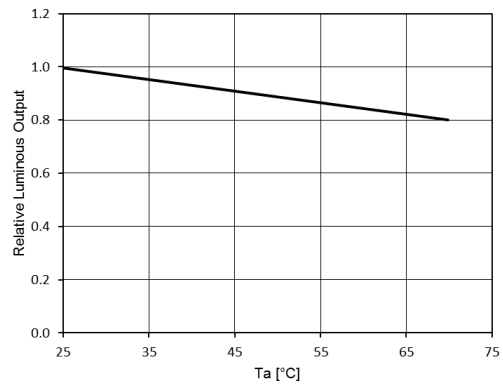


FORWARD CURRENT DERATING BASED ON SOLDER POINT



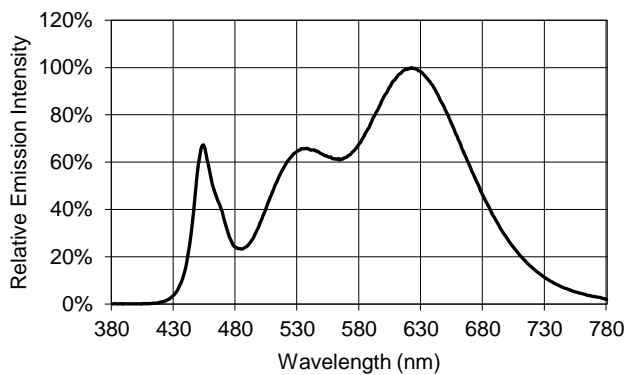
NOTE: DE-RATING CURVES ARE MEANT FOR RECOMMENDATION ONLY AND ARE NOT MEANT TO PROVIDE GUARANTEES OF PRODUCT STABILITY AND LONGEVITY.

SOLDER POINT TEMPERATURE VS RELATIVE LUMINOUS OUTPUT



TYPICAL SPECTRAL DISTRIBUTION GRAPHS

3200K



5600K

