DIALIGHT PART NUMBER	LED COLOR	EPOXY COLOR	"A" DIM	"B" Dim	DIW
551-0211F	GaP GREEN	TINTED DIFFUSED	.020	. 122	. 185
551-0311F	GaAsP/GaP YELLOW	TINTED DIFFUSED	.020	. 122	. 185
551-0411F	GaAsP/GaP RED	TINTED DIFFUSED	.020	. 122	. 185
551-0811F	GaN BLUE	WHITE DIFFUSED	.020	.110	. 181
551-1111F	RED (2mA)	TINTED DIFFUSED	.018	.115	. 175
551-1211F	YELLOW (2mA)	TINTED DIFFUSED	.018	.115	. 175
551-1311F	GREEN (2mA)	TINTED DIFFUSED	.018	.115	. 175
551-5911F	InGaN GREEN	COLORLESS DIFFUSED	.020	.110	. 181

"A" SQ.

.100 -

. 100

.100

[2,54]

[2,54]

RECOMMENDED HOLE PATTERN GAUGE

[1.27]

 $\emptyset$ .032

(TOLERANCES: ±.002)

[0,81] TYP,

## **RoHS COMPLIANT 551-XX11F**

Part Numbers with the "F" suffix ending are RoHS Compliant. For example: 551-0211F

Packaging is marked with "RoHS Compliant" label or equivalent markings. Parts can be wave soldered, dip soldered or hand soldered using typical lead-free soldering process with max 260°C temp. för 5 sec.

REV	ECN NO	REVISIONS	DRN	CKD	APP	DATE
A		NEW RELEASE	AJF	KLJ	NO	10-6-10

51-5911F	InGaN GREEN	COLORLESS DIFFUSED   .020   .110   .	181
	156 [3,96]	-Ø.135	.283
260		[3,43] MAX FLANGE "B"±.010	
. 260 [6,6	1	00 ,081 	
.020 [0,51]	[3]	T 34 3,41 ♥	2
.020 — [0,51]			100 [2,54]
SQ. NOM. TYP.		5.028±.005 [0,71±0,12]	.247

OPERATING CHARACTERISTICS AT 25°C AMBIENT - 10mA LEDS										
LED COLOR	LED COLOR	PEAK WAVELENGTH (nm)	DOMINANT VIEWING ANGLE (DEGREE)		INTER	NOUS NSITY :d)	VOL.	WARD TAGE V)	REVERSE CURRENT (μΑ)	
	,,	MIN	TYP	MAX	TYP	MIN	TYP	TYP	MAX	MAX
GaP GREEN	563		—		45	5.6	16.0	2.1	3.0	10 @ Vr = 3 V
GaAsP/GaP YELLOW	585				45	2.2	6.3	2.1	3.0	10 @ Vr = 3 V
GaAsP/GaP RED	650	_			45	3.6	10.0	2.0	3.0	10 @ Vr = 3 V
GaN BLUE	428	460	465	470	70	22.4	35.5	3.5	4.1	10 @ Vr = 5 V
InGaN GREEN	523	523	532	541	30	280	495	3.0	3.7	10 @ Vr = 5 V

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - 10mA	GaP GREEN	GaAsP/GaP YELLOW	GaAsP/GaP RED	GaN BLUE	I nGaN GREEN	UNITS
POWER DISSIPATION	75	60	60	90	80	mW
PEAK FORWARD CURRENT (1/10 DUTY CYCLE, 0.1ms PULSE WIDTH) (.005 DUTY CYCLE, 0.01ms PULSE WIDTH FOR InGaN GREEN AND GAN BLUE)	60	60	60	200	250	mA
CONTINUOUS FORWARD CURRENT	25	20	20	20	20	mA
DERATE LINEARLY FROM 50°C (FROM 65°C FOR InGaN GREEN)	0.50	0.50	0.50	0.44	0.57	mA/°C
REVERSE VOLTAGE		3			5	٧
LEAD SOLDERING TEMPERATURE (.063" [1.6mm] FROM BODY) FOR 5 SEC.		260				
OPERATING TEMPERATURE		-25 TO +85 -55 TO +100				
STORAGE TEMPERATURE		-30 TO +1	-55 T	001+ C	°C	

OPERATING CHARACTERISTICS AT 25°C AMBIENT - 2ma LOW CURRENT LEDS												
LED COLOR	PEAK WAVELENGTH (nm)	DOMINANT WAVELENGTH (nm)	VIEWING ANGLE (DEGREE)	IN	JMINOU TENSI (mcd)	TY	VOL.	VARD Fage /)		EVER URRE (μΑ:	NT	
	·	TYP	TYP	MIN	TYP	MAX	TYP	MAX		MAX		
RED	635	623	60	1.1	2.3	5.0	1.7	2.2	10 @	VR	= 5	٧
GREEN	565	569	60	1.0	1.8	3.0	1.9	2.2	10 @	VR	= 5	٧
YELLOW	585	588	60	0.4	1.4	1.8	1.8	2.2	10 @	VR	= 5	٧

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT – 2mA LOW CURRENT LEDS	RED	GREEN	YELLOW	UNITS
POWER DISSIPATION	20	20	20	mW
PEAK FORWARD CURRENT (1/10 DUTY CYCLE, O.Ims PULSE WIDTH)	500	500	500	mA
CONTINUOUS FORWARD CURRENT	7	7	7	mA
REVERSE VOLTAGE		5		V
LEAD SOLDERING TEMPERATURE (.063" [1.6mm] FROM BODY) FOR 5 SEC.		260		°C
OPERATING TEMPERATURE	- 5	5 TO +1	00	°C
STORAGE TEMPERATURE	- 5	5 TO +1	00	°C





**ATTENTION:** OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES

## NOTES:

- 1. LED LEAD DIMENSIONS SHOWN ARE MEASURED AT HOUSING EXIT.
  2. LEADS TO FIT INTO HOLES SPACED AS PER PATTERN.
- 3. PIN NUMBERS FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
- 4. DIALIGHT PART NUMBERS: 551-XXIIF.
- 5. THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS), MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING, AND STORAGE IN ACCORDANCE WITH IPC-A-610.



THIS DRAWING AND THE CONTENTS HEREIN ARE CONFIDENTIAL AND

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SHEET I OF I FAMILY TABLE:

SCALE 2.000

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Dialight:

 $\underline{551\text{-}0211F} \ \underline{551\text{-}0411F} \ \underline{551\text{-}1211F} \ \underline{551\text{-}0311F} \ \underline{551\text{-}0811F} \ \underline{551\text{-}1311F} \ \underline{551\text{-}1111F}$