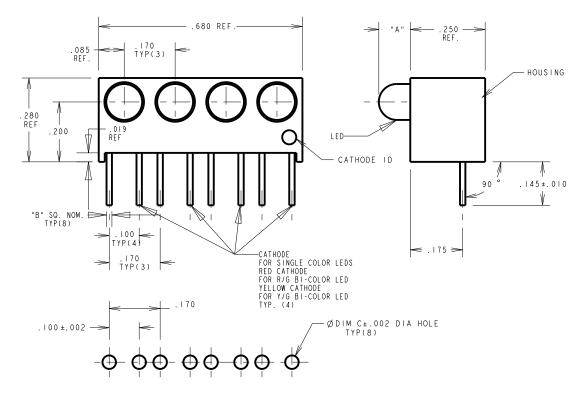
OPERATING CHARACTERISTICS A	T 25°	CAMB	IENT F	OR P/	N 551-	0207	-00 <b>4</b> F	(GREEN)
LED CHARACTERISTICS	MIN	TYP	MAX	UNITS	TE	ST C	ONDIT	IONS
LUMINOUS INTENSITY	5.6	12.6	29	mc d		l F	= 1 0 m A	
FORWARD VOLTAGE	1.5	2.1	2.6	٧		l F	= I 0 m A	
REVERSE CURRENT			100	μА		VR	= 5	V
PEAK WAVELENGTH		565		nm				
2 = 1/2 INTENSITY ANGLE		60		0		l F	= 1 0 m A	
CAPACITANCE		35		p f	VR	= 0 V ,	f = 1	MHz
ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT								
POWER DISSIPATION						I20 mW		
DERATE LINEALY FROM 50°C						.40 mA/°C		
CONTINUOUS FORWARD CURRE	NT					30 mA		
PEAK FORWARD CURRENT							90 m	4
PEAK REVERSE VOLTAGE							5 V	
LEAD SOLDERING TEMP. 5 SEC. 1/16" FROM BASE						260°C		
OPERATING TEMPERATURE						5°C	ТО	100°C
STORAGE TEMPERATURE					- 5	5° C	ТО	100°C

OPERATING CHARACTERISTICS AT	25°C	AMBI	ENT F	OR P/N	i 551-0307-004F (Yi	ELLOW)
LED CHARACTERISTICS	MIN	TYP	MAX	UNITS	TEST CONDITIO	NS
LUMINOUS INTENSITY	3.7	8.7	30	mc d	1 F = 1 0 m A	
FORWARD VOLTAGE		2.1	2.6	٧	1 F = 1 0 m A	
REVERSE CURRENT			100	mΑ	VR = 5 V	
PEAK WAVELENGTH		585		nm		
2 = 1/2 INTENSITY ANGLE		60		0	F =   0 m A	
CAPACITANCE		15		pf	VR=0V, f=1 N	ИНz
ABSOLUTE MAXIMUM RATINGS A	T 25°	C AME	BIENT			
POWER DISSIPATION					120 mW	
DERATE LINEALY FROM 50°C					.25 mA/	°C
CONTINUOUS FORWARD CURREI	١T				20 mA	
PEAK FORWARD CURRENT					60 mA	
PEAK REVERSE VOLTAGE					5 V	
LEAD SOLDERING TEMP. 5 SI	260°C					
OPERATING TEMPERATURE					-55°C TO	100°C
STORAGE TEMPERATURE					-55°C TO	100°C

OPERATING CHARACTERISTICS	AT 25°	°C AM	BIENT	FOR F	P/N 551-0407-004F (RED)
LED CHARACTERISTICS	MIN	TYP	MAX	UNITS	TEST CONDITIONS
LUMINOUS INTENSITY	2.5	8.7	18	mc d	IF=IOmA
FORWARD VOLTAGE		2.0	2.6	٧	IF=IOmA
REVERSE VOLTAGE	5			٧	IR= 10μA
PEAK WAVELENGTH		635		nm	
2 = 1/2 INTENSITY ANGLE		60		0	IF=IOmA
CAPACITANCE		20		p f	VR=OV, f=I MHz
ABSOLUTE MAXIMUM RATINGS A	T 25°	C AME	BIENT		
POWER DISSIPATION					IOO mW
DERATE LINEALY FROM 50°C					.40 mA/°C
CONTINUOUS FORWARD CURRE	NT				30 mA
PEAK FORWARD CURRENT					90 mA
LEAD SOLDERING TEMP. 5 S	260°C				
OPERATING TEMPERATURE	-55°C TO 100°				
STORAGE TEMPERATURE	-55°C TO 100°				

PART NUMBER	LED COLOR	DIM. "A"	DIM. "B"	DIM. "C"
551-0207-004F	GREEN	.103±.012	.018x.016	0.040
551-0307-004F	YELLOW	.103±.012	.018x.016	0.040
551-0407-004F	RED	.103±.012	.018x.016	0.040
551-0507-004F	RED	.103±.012	.018	0.043
551-0607-004F	GREEN	.103±.012	.018	0.043
551-0707-004F	YELLOW	.103±.012	.018	0.043
551-1107-004F	RED	.103±.012	.018	0.043
551-1207-004F	YELLOW	.103±.012	.018	0.043
551-1307-004F	GREEN	.103±.012	.018	0.043
551-1407-004F	AlGaAs RED	.103±.012	.018	0.043
551-2507-004F	ORANGE	.103±.012	.018	0.043
551-3007-004F	RED/GREEN	.103±.012	.020	0.043
551-3107-004F	YELLOW/GREEN	.103±.012	.018	0.043



RECOMMENDED HOLE PATTERN GAUGE

OPERATING CHARACTERISTIC	S AT	25° C	AMBIEI	NT FO	R P/N 55	1-0507-00	)4F (F	RED)
LED CHARACTERISTICS	MIN	TYP	MAX	UNITS	TE	ST CONE	NOITION	S
LUMINUOS INTENSITY	8.7	29		mc d		V F = 5	٧	
FORWARD CURRENT		10	20	m A		V F = 5	٧	
REVERSE CURRENT			100	μА		V F = 5	٧	
PEAK WAVELENGTH		635		nm				
2 = 1/2 INTENSITY ANGLE		60		0				
ABSOLUTE MAXIMUM RATINGS A	T 25°	C AME	BIENT					
FORWARD VOLTAGE						7	7.5 V	'
DERATE LINEALY FROM 50°C						. 08	6 V	/° C
REVERSE VOLTAGE							5 V	
LEAD SOLDERING TEMP. 5 SEC. (.063/1.60)" FROM BODY							260°C	
OPERATING TEMPERATURE							TO	85°C
STORAGE TEMPERATURE						-55°C	TO	100°C

REV	ECN NO	REVISIONS	DRN	CKD	APP	DATE
А		NEW RELEASE	ALV	MES	NO	8-8-07
В		ADDED P/NS 551-3007-004F & 551-3107-004F	AJF	KLJ	NO	5-8-11
С		UPDATED DIM A, B, C, AND LED SPECS FOR P/N'S 551-0207/0307/0407-004F.	ВР		NO	8-22-16

## RoHS COMPLIANT 551-XXO7-004F

Part Numbers with the "F" suffix ending are RoHS Compliant. For example: 551-0207-004F

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. for 5 sec.

## NOTES:

- I. LED LEAD DIMENSIONS SHOWN ARE MEASURED AT HOUSING EXIT.
- 2. LEADS TO FIT INTO HOLES SPACED AS PER PATTERN.
- 3. DIALIGHT PART NUMBERS: 551-XX07-004F
- 4. THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING, AND STORAGE IN ACCORDANCE WITH IPC-A-610.

OPERATING CHARACTERISTICS AT 25°C AMBIENT FOR P/N 551-3107-004F (Y/G)							
LED CHARACTERISTICS	COLOR	MIN	TYP	MAX	UNITS	TEST CONDITIONS	
LUMINOUS INTENSITY	YELLOW	3.0		8.5	mad	F =   OmA	
LOMINOO2 INTENSTIT	GREEN	6.5		18.0	mcd	IF-IUMA	
FORWARD VOLTAGE	YELLOW		2.1	2.6	V	F =   OmA	
FORWARD VOLTAGE	GREEN		2.1	2.6	] V	IF-IUMA	
REVERSE CURRENT	ALL			100	μА	V R = 3 V	
DEAK WAVELENCTH	YELLOW		585				
PEAK WAVELENGTH	GREEN		565		nm		
2 = 1/2 INTENSITY ANGLE	ALL		80		0	F =   0 m A	

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT	YELLOW	GREEN
POWER DISSIPATION	60 mW	100 mW
DERATE LINEALY FROM 50°C	.25 mA/°C	.40 mA/°C
CONTINUOUS FORWARD CURRENT	20 mA	30 mA
PEAK FORWARD CURRENT	80 mA	120 mA
PEAK REVERSE VOLTAGE	5 V	5 V
LEAD SOLDERING TEMP. 5 SEC. 1/16" FROM BASE	26	D° C
OPERATING TEMPERATURE	-55°C T(	) +   00° C
STORAGE TEMPERATURE	-55°C T(	) +   00° C

FSCM

ATTENTION: OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES

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83330 2 FAMILY TABLE:

OPERATING CHARACTERISTICS AT	25° C	AMBIE	NT FO	R P/N 551	-0707-004F (YELLOW)
LED CHARACTERISTICS	MIN	TYP	MAX	UNITS	TEST CONDITIONS
LUMINUOS INTENSITY	3.7	12.6		mc d	V R = 5 V
FORWARD CURRENT		10	20	mA	V R = 5 V
REVERSE CURRENT			100	μА	V R = 5 V
PEAK WAVELENGTH		585		nm	
2 = 1/2 INTENSITY ANGLE		60		DEGREES	
ABSOLUTE MAXIMUM RATINGS AT 25°	C AMBIEN	İT	•		
FORWARD VOLTAGE					7.5 V
DERATE LINEALY FROM 50°C					.086 V/°C
REVERSE VOLTAGE					5 V
LEAD SOLDERING TEMP. 5 SEC. (	260°C				
OPERATING TEMPERATURE	-40°C TO 85°C				
STORAGE TEMPERATURE	-55°C TO 100°C				

OPERATING CHARACTERISTICS AT	<sup>-</sup> 25°C	AMBIE	NT FO	R P/N 5	51-1107	-004F (RED)	
LED CHARACTERISTICS	MIN	TYP	MAX	UNITS	1	TEST CONDITIONS	
LUMINUOS INTENSITY	1.0	1.6		mc d	I F = 2 m A		
FORWARD VOLTAGE		1.7	2.2	m A		I F = 2 m A	
REVERSE CURRENT			10	μА		V R = 5 V	
PEAK WAVELENGTH		635		nm			
2 = 1/2 INTENSITY ANGLE		60		DEGREES			
ABSOLUTE MAXIMUM RATINGS AT 25°							
POWER DISSIPATION					20 mW		
CONTINUOUS FORWARD CURRENT						7 mA	
PEAK FORWARD CURRENT (1/10 DU	TY CYCL	Ε, Ο.	l ms P	ULSE WID	TH)	500 mA	
REVERSE VOLTAGE						5 V	
LEAD SOLDERING TEMP. 5 SEC. (.063/1.60)" FROM BODY						260°C	
OPERATING TEMPERATURE						-55°C TO 100°C	
STORAGE TEMPERATURE						-55°C TO 100°C	

LED CHARACTERISTICS	MIN	TYP	MAX	UNITS	TEST CONDITIONS
LUMINUOS INTENSITY	ISTTY 2.3 5 mcd				1 F = 2 m A
FORWARD VOLTAGE		1.8	2.4	mA	1 F = 2 m A
REVERSE CURRENT			100	μА	V R = 5 V
PEAK WAVELENGTH		591		nm	
2 = I/2 INTENSITY ANGLE		60		DEGREES	
ABSOLUTE MAXIMUM RATINGS AT 25°C					
POWER DISSIPATION					75 mW
CONTINUOUS FORWARD CURRENT					30 mA
PEAK FORWARD CURRENT (1/10 DUT	Y CYCL	Ε, Ο.	l ms P	ULSE WID	TH) 60 mA
REVERSE VOLTAGE					5 V
LEAD SOLDERING TEMP. 5 SEC. (.	260°C				
OPERATING TEMPERATURE	-40°C TO 100°				
STORAGE TEMPERATURE	-55°C TO 100°				

OPERATING CHARACTERISTICS A	T 25°C	AMBIE	NT FC	OR P/N 55	51-1407-004F (RED)		
LED CHARACTERISTICS	MIN	TYP	MAX	UNITS	TEST CONDITIONS		
LUMINOUS INTENSITY	2	3		mc d	F =   0 m A		
FORWARD VOLTAGE		1.6	1.8	٧	F =   0 m A		
REVERSE VOLTAGE	5			٧	I R = 1 0 0 μ A		
PEAK WAVELENGTH		645		nm			
2 = 1/2 INTENSITY ANGLE		45		DEGREES	F =   0 m A		
CAPACITANCE		30		p f	VR=OV, f=IMHz		
ABSOLUTE MAXIMUM RATINGS AT 25							
POWER DISSIPATION					87 mW		
DERATE LINEALY FROM 50°C					.50 mA/°C		
CONTINUOUS FORWARD CURRENT					30 mA		
PEAK PULSE CURRENT 10 μs PUL	SE				300 mA		
PEAK REVERSE VOLTAGE	5 V						
LEAD SOLDERING TEMP. 5 SEC.	260°C						
OPERATING TEMPERATURE	-20°C TO 100°C						
STORAGE TEMPERATURE	-55°C TO 100°C						

OPERATING CHARACTERISTICS A	T 25°C	AMBIE	NT FO	R P/N 55	1-250	7-00 <b>4</b> F	(ORA	NGE)
LED CHARACTERISTICS	MIN	TYP	MAX	UNITS	1	EST COM	IDITIO	NS
LUMINOUS INTENSITY	3.4	7.0	10.8	mc d		F =	0mA	
FORWARD VOLTAGE	1.5	1.9	2.4	٧		F=	0mA	
REVERSE CURRENT			100	μА		V R = 5	V	
PEAK WAVELENGTH		600		nm				
2 = 1/2 INTENSITY ANGLE		60		DEGREES	I F = 1 0 m A			
CAPACITANCE		4		pf	Vr=OV, f=IMHz			
ABSOLUTE MAXIMUM RATINGS AT 25°	C AMBIEN	IT						
POWER DISSIPATION						135 mW		
DERATE LINEALY FROM 50°C						.50 mA/°C		
AVERAGE FORWARD CURRENT						25 mA		
PEAK FORWARD CURRENT							90 mA	
REVERSE VOLTAGE						5 V		
LEAD SOLDERING TEMP. 5 SEC. 1/16" FROM BASE						260°C		
OPERATING TEMPERATURE					-55°C	TO	100°C	
STORAGE TEMPERATURE					-55°C	TO	100°C	

OPERATING CHARACTERISTICS AT	25° C	AMBIE	NT FO	R P/N 551	-0607-004F (GREEN)
LED CHARACTERISTICS	MIN	TYP	MAX	UNITS	TEST CONDITIONS
LUMINUOS INTENSITY	5.6	19		mc d	V R = 5 V
FORWARD CURRENT		10	20	mA	V R = 5 V
REVERSE CURRENT			100	μА	V R = 5 V
PEAK WAVELENGTH		565		nm	
2 = 1/2 INTENSITY ANGLE		60		DEGREES	
ABSOLUTE MAXIMUM RATINGS AT 25°C					
FORWARD VOLTAGE	7.5 V				
DERATE LINEALY FROM 50°C	.086 V/°C				
REVERSE VOLTAGE	5 V				
LEAD SOLDERING TEMP. 5 SEC. (.	260°C				
OPERATING TEMPERATURE					-40°C TO 85°C
STORAGE TEMPERATURE					-55°C TO 100°C

OPERATING CHARACTERISTICS AT	25° C	AMBIE	NT FO	R P/N 5	51-1307-00	04F (GREEN)		
LED CHARACTERISTICS	MIN	TYP	MAX	UNITS	TEST CONDITIONS			
LUMINUOS INTENSITY	1.0	1.6		mc d	I F = 2mA			
FORWARD VOLTAGE		1.9	2.2	mA	I F = 2 m A			
REVERSE CURRENT			10	μА	V R = 5 V			
PEAK WAVELENGTH		565		nm				
2 = 1/2 INTENSITY ANGLE		60		DEGREES				
ABSOLUTE MAXIMUM RATINGS AT $25^{\circ}\mathrm{C}$	AMBIEN	ΙT						
POWER DISSIPATION						20 mW		
CONTINUOUS FORWARD CURRENT						7 mA		
PEAK FORWARD CURRENT (1/10 DUTY CYCLE, 0.1 ms PULSE WIDTH)						500 mA		
REVERSE VOLTAGE						5 V		
LEAD SOLDERING TEMP. 5 SEC. (.063/I.60)" FROM BODY						260°C		
OPERATING TEMPERATURE					= (	55°C TO 100°C		
STORAGE TEMPERATURE				- (	55°C TO 100°C			

OPERATING CHARACTERISTICS AT 25°C AMBIENT FOR P/N 551-3007-004F (R/G)							
LED CHARACTERISTICS	COLOR	MIN	TYP	MAX	UNITS	TEST CONDITIONS	
LUMINOUS INTENSITY	RED	3.0	5.6			l	
	GREEN	3.7	8.7		mcd	IF - Z UMA	
FORWARD VOLTAGE	RED		2.0	2.6	V	l	
	GREEN		2.1	2.6	]	IF - Z UMA	
REVERSE CURRENT	ALL			100	μА	V R = 5 V	
PEAK WAVELENGTH	RED		630				
	GREEN		565		nm		
2 = 1/2 INTENSITY ANGLE	ALL		200		0	I F = 2 0 m A	

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT	RED/GREEN
POWER DISSIPATION	100 mW
DERATE LINEALY FROM 50°C	.40 mA/°C
CONTINUOUS FORWARD CURRENT	30 mA
PEAK FORWARD CURRENT	120 mA
PEAK REVERSE VOLTAGE	5 V
LEAD SOLDERING TEMP. 5 SEC. 1/16" FROM BASE	260°C
OPERATING TEMPERATURE	-55°C TO +100°C
STORAGE TEMPERATURE	-55°C TO +100°C

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SHEET 2 OF 2 FAMILY TABLE:

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