



# Customer Product/Process Change Notification

PCN # OES11042502\_598XX

Issued Date: 4/20/2011

Issued By: Nick Oesterheld

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Change affects whole product family?  No

**Part #'s affected (See attached if entire product family is affected)**

598-8310-107F; 598-8320-107F; 598-8330-107F; 598-8340-107F; 598-8350-107F; 598-8360-107F; 598-8370-107F; 598-8380-107F; 598-8391-107F; and also -102F ending part numbers.

**Description of Change:**

Replaced P/N 598-83xx-107F,-102F with P/N 598-83xx-117F,-112F LED with 1/4 round plated thru holes on each corner for better part alignment to PCB.

**Reason for Change:**

Update specs and supply an improved Right Angle SM LED with more surface area for improved alignment to pcb pads.

**Properties of Old vs. Changed Product:**

See attached comparison sheets

**Disposition of Old Product:**

Use as is until Depleted

Expected Implementation Date:

Customer Feedback Expected by:

**Additional Comments: (Include Potential Risks if Appropriate)**

**Supporting Qualification Data:**

Available upon Request

**Approved By:**

(Minimum of three approvals are required.)

Vice President of Operations: \_\_\_\_\_

Vice President of Sales OED/Signals: \_\_\_\_\_

Director of Customer Service: Kathy Smith

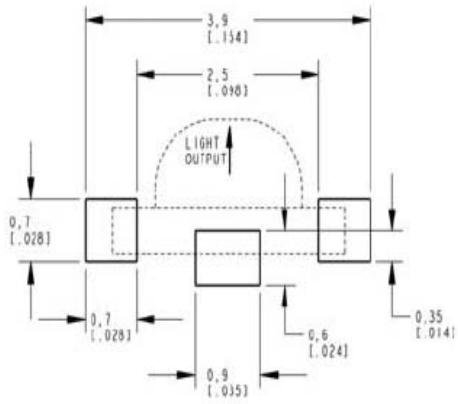
Director, Global Sales & Distribution: Robert E. Derringer

Director of Quality: Rich Liskoff

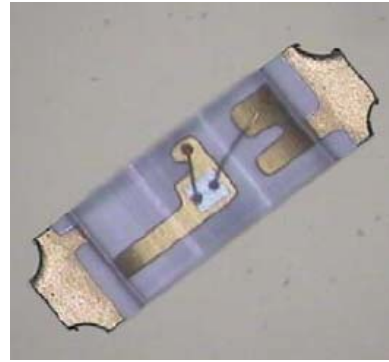
**598-83XX-107F, -102F**



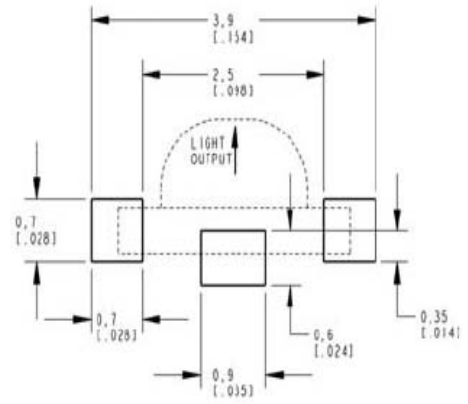
**RECOMMENDED PAD LAYOUT**



**598-83XX-117F, -112F**



**RECOMMENDED PAD LAYOUT**



"598 SERIES" SMD LED 1208 PACKAGE RIGHT ANGLE RED	LED COMPARISON TABLE							
	598-8310-107F				598-8310-117F			
	OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
	If (mA)	MIN	TYP	MAX	If (mA)	MIN	TYP	MAX
LUMINOUS INTENSITY (mcd)	20	-----	-----	70.0	20	43.0	-----	70.0
FORWARD VOLTAGE (V)	20	1.8	2.0	2.4	20	1.8	2.0	2.4
DOMINANT WAVELENGTH (nm)	20	630	635	640	20	630	635	640
VIEWING ANGLE 2θ1/2 (deg)	-----	-----	160	-----	-----	-----	160	-----
ABSOLUTE MAXIMUM RATINGS @ TA=25° C				ABSOLUTE MAXIMUM RATINGS @ TA=25° C				
POWER DISSIPATION (mW)				60				48
CONTINUOUS FORWARD CURRENT (mA)				25				20
REVERSE VOLTAGE				5				5
OPERATING TEMP. RANGE (°C)				-40 to +100				-40 to +100
STORAGE TEMP. RANGE (°C)				-40 to +100				-40 to +100
PHYSICAL DIMENSIONS				PHYSICAL DIMENSIONS				
LED EMITTING COLOR				RED				RED
LED EPOXY COLOR				WATER CLEAR				WATER CLEAR
DIE TECHNOLOGY				AllnGaP				AllnGaP

"598 SERIES" SMD LED 1208 PACKAGE RIGHT ANGLE RED-ORANGE	LED COMPARISON TABLE							
	598-8320-107F				598-8320-117F			
	OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
	If (mA)	MIN	TYP	MAX	If (mA)	MIN	TYP	MAX
LUMINOUS INTENSITY (mcd)	20	80.0	120.0	150.0	20	80.0	120.0	230.0
FORWARD VOLTAGE (V)	20	1.8	2.0	2.4	20	1.8	2.0	2.4
DOMINANT WAVELENGTH (nm)	20	620	625	630	20	620	625	630
VIEWING ANGLE 2θ1/2 (deg)	-----	-----	160	-----	-----	-----	160	-----
ABSOLUTE MAXIMUM RATINGS @ TA=25° C				ABSOLUTE MAXIMUM RATINGS @ TA=25° C				
POWER DISSIPATION (mW)				60				48
CONTINUOUS FORWARD CURRENT (mA)				25				20
REVERSE VOLTAGE				5				5
OPERATING TEMP. RANGE (°C)				-40 to +100				-40 to +100
STORAGE TEMP. RANGE (°C)				-40 to +100				-40 to +100
PHYSICAL DIMENSIONS				PHYSICAL DIMENSIONS				
LED EMITTING COLOR				RED-ORANGE				RED-ORANGE
LED EPOXY COLOR				WATER CLEAR				WATER CLEAR
DIE TECHNOLOGY				AllnGaP				AllnGaP

"598 SERIES" SMD LED 1208 PACKAGE RIGHT ANGLE ORANGE	LED COMPARISON TABLE							
	598-8330-107F				598-8330-117F			
	OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
	If (mA)	MIN	TYP	MAX	If (mA)	MIN	TYP	MAX
LUMINOUS INTENSITY (mcd)	20	90.0	110.0	150.0	20	80.0	110.0	150.0
FORWARD VOLTAGE (V)	20	1.8	2.0	2.4	20	1.8	2.0	2.4
DOMINANT WAVELENGTH (nm)	20	600	-----	610	20	600	-----	610
VIEWING ANGLE 2θ1/2 (deg)	-----	-----	160	-----	-----	-----	160	-----
ABSOLUTE MAXIMUM RATINGS @ TA=25° C				ABSOLUTE MAXIMUM RATINGS @ TA=25° C				
POWER DISSIPATION (mW)				60				48
CONTINUOUS FORWARD CURRENT (mA)				25				20
REVERSE VOLTAGE				5				5
OPERATING TEMP. RANGE (°C)				-40 to +100				-40 to +100
STORAGE TEMP. RANGE (°C)				-40 to +100				-40 to +100
PHYSICAL DIMENSIONS				PHYSICAL DIMENSIONS				
LED EMITTING COLOR				ORANGE				ORANGE
LED EPOXY COLOR				WATER CLEAR				WATER CLEAR
DIE TECHNOLOGY				AllnGaP				AllnGaP

"598 SERIES" SMD LED 1208 PACKAGE RIGHT ANGLE YELLOW	LED COMPARISON TABLE							
	598-8340-107F				598-8340-117F			
	OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
	If (mA)	MIN	TYP	MAX	If (mA)	MIN	TYP	MAX
LUMINOUS INTENSITY (mcd)	20	100.0	130.0	160.0	20	100.0	140.0	180.0
FORWARD VOLTAGE (V)	20	1.8	2.0	2.4	20	1.8	2.0	2.4
DOMINANT WAVELENGTH (nm)	20	590	-----	595	20	587	-----	597
VIEWING ANGLE 2θ1/2 (deg)	-----	-----	160	-----	-----	-----	160	-----
<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				
POWER DISSIPATION (mW)	55			50				
CONTINUOUS FORWARD CURRENT (mA)	25			20				
REVERSE VOLTAGE	5			5				
OPERATING TEMP. RANGE (°C)	-40 to +100			-40 to +100				
STORAGE TEMP. RANGE (°C)	-40 to +100			-40 to +100				
<b>PHYSICAL DIMENSIONS</b>				<b>PHYSICAL DIMENSIONS</b>				
LED EMITTING COLOR	YELLOW			YELLOW				
LED EPOXY COLOR	WATER CLEAR			WATER CLEAR				
DIE TECHNOLOGY	AlInGaP			AlInGaP				

"598 SERIES" SMD LED 1208 PACKAGE RIGHT ANGLE YELLOW	LED COMPARISON TABLE							
	598-8350-107F				598-8350-117F			
	OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
	If (mA)	MIN	TYP	MAX	If (mA)	MIN	TYP	MAX
LUMINOUS INTENSITY (mcd)	20	100.0	130.0	160.0	20	100.0	140.0	180.0
FORWARD VOLTAGE (V)	20	1.8	2.0	2.4	20	1.8	2.0	2.4
DOMINANT WAVELENGTH (nm)	20	583	-----	590	20	582	-----	587
VIEWING ANGLE 2θ1/2 (deg)	-----	-----	160	-----	-----	-----	160	-----
<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				
POWER DISSIPATION (mW)	55			50				
CONTINUOUS FORWARD CURRENT (mA)	25			20				
REVERSE VOLTAGE	5			5				
OPERATING TEMP. RANGE (°C)	-40 to +100			-40 to +100				
STORAGE TEMP. RANGE (°C)	-40 to +100			-40 to +100				
<b>PHYSICAL DIMENSIONS</b>				<b>PHYSICAL DIMENSIONS</b>				
LED EMITTING COLOR	YELLOW			YELLOW				
LED EPOXY COLOR	WATER CLEAR			WATER CLEAR				
DIE TECHNOLOGY	AlInGaP			AlInGaP				

"598 SERIES" SMD LED 1208 PACKAGE RIGHT ANGLE YELLOW-GREEN	LED COMPARISON TABLE							
	598-8360-107F				598-8360-117F			
	OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
	If (mA)	MIN	TYP	MAX	If (mA)	MIN	TYP	MAX
LUMINOUS INTENSITY (mcd)	20	30.0	50.0	60.0	20	43.0	54.0	100.0
FORWARD VOLTAGE (V)	20	1.8	2.0	2.4	20	1.8	2.0	2.4
DOMINANT WAVELENGTH (nm)	20	570	-----	575	20	570	-----	575
VIEWING ANGLE 2θ1/2 (deg)	-----	-----	160	-----	-----	-----	160	-----
<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				
POWER DISSIPATION (mW)	60			48				
CONTINUOUS FORWARD CURRENT (mA)	25			20				
REVERSE VOLTAGE	5			5				
OPERATING TEMP. RANGE (°C)	-40 to +100			-40 to +100				
STORAGE TEMP. RANGE (°C)	-40 to +100			-40 to +100				
<b>PHYSICAL DIMENSIONS</b>				<b>PHYSICAL DIMENSIONS</b>				
LED EMITTING COLOR	YELLOW-GREEN			YELLOW-GREEN				
LED EPOXY COLOR	WATER CLEAR			WATER CLEAR				
DIE TECHNOLOGY	AlInGaP			AlInGaP				

"598 SERIES" SMD LED 1208 PACKAGE RIGHT ANGLE GREEN	LED COMPARISON TABLE							
	598-8370-107F				598-8370-117F			
	OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
	If (mA)	MIN	TYP	MAX	If (mA)	MIN	TYP	MAX
LUMINOUS INTENSITY (mcd)	20	18.0	28.0	50.0	20	18.0	28.0	43.0
FORWARD VOLTAGE (V)	20	1.8	2.0	2.4	20	1.8	2.0	2.4
DOMINANT WAVELENGTH (nm)	20	562	-----	570	20	560	-----	570
VIEWING ANGLE 2θ1/2 (deg)	-----	-----	160	-----	-----	-----	160	-----
<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				
POWER DISSIPATION (mW)	60			48				
CONTINUOUS FORWARD CURRENT (mA)	25			20				
REVERSE VOLTAGE	5			5				
OPERATING TEMP. RANGE (°C)	-40 to +100			-40 to +100				
STORAGE TEMP. RANGE (°C)	-40 to +100			-40 to +100				
<b>PHYSICAL DIMENSIONS</b>				<b>PHYSICAL DIMENSIONS</b>				
LED EMITTING COLOR	GREEN			GREEN				
LED EPOXY COLOR	WATER CLEAR			WATER CLEAR				
DIE TECHNOLOGY	GaP			AllnGaP				

"598 SERIES" SMD LED 1208 PACKAGE RIGHT ANGLE GREEN	LED COMPARISON TABLE							
	598-8380-107F				598-8380-117F			
	OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
	If (mA)	MIN	TYP	MAX	If (mA)	MIN	TYP	MAX
LUMINOUS INTENSITY (mcd)	20	150.0	220.0	300.0	20	350.0	480.0	650.0
FORWARD VOLTAGE (V)	20	3.0	3.2	3.5	20	2.8	3.2	3.4
DOMINANT WAVELENGTH (nm)	20	520	523	525	20	515	520	525
VIEWING ANGLE 2θ1/2 (deg)	-----	-----	160	-----	-----	-----	160	-----
<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				
POWER DISSIPATION (mW)	87.5			68				
CONTINUOUS FORWARD CURRENT (mA)	25			20				
REVERSE VOLTAGE	5			5				
OPERATING TEMP. RANGE (°C)	-40 to +100			-40 to +100				
STORAGE TEMP. RANGE (°C)	-40 to +100			-40 to +100				
<b>PHYSICAL DIMENSIONS</b>				<b>PHYSICAL DIMENSIONS</b>				
LED EMITTING COLOR	GREEN			GREEN				
LED EPOXY COLOR	WATER CLEAR			WATER CLEAR				
DIE TECHNOLOGY	InGaN			InGaN				

"598 SERIES" SMD LED 1208 PACKAGE RIGHT ANGLE BLUE	LED COMPARISON TABLE							
	598-8391-107F				598-8391-117F			
	OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
	If (mA)	MIN	TYP	MAX	If (mA)	MIN	TYP	MAX
LUMINOUS INTENSITY (mcd)	20	90.0	140.0	160.0	20	100.0	140.0	230.0
FORWARD VOLTAGE (V)	20	2.8	3.2	3.5	20	2.8	3.2	3.5
DOMINANT WAVELENGTH (nm)	20	470	473	475	20	470	473	475
VIEWING ANGLE 2θ1/2 (deg)	-----	-----	160	-----	-----	-----	160	-----
<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>				
POWER DISSIPATION (mW)	87.5			70				
CONTINUOUS FORWARD CURRENT (mA)	25			20				
REVERSE VOLTAGE	5			5				
OPERATING TEMP. RANGE (°C)	-40 to +100			-40 to +100				
STORAGE TEMP. RANGE (°C)	-40 to +100			-40 to +100				
<b>PHYSICAL DIMENSIONS</b>				<b>PHYSICAL DIMENSIONS</b>				
LED EMITTING COLOR	BLUE			BLUE				
LED EPOXY COLOR	WATER CLEAR			WATER CLEAR				
DIE TECHNOLOGY	InGaN			InGaN				