



Customer Product/Process Change Notification

PCN # 104277
Issued Date: 06/14/23
Issued By: Cheryll Santiago
Author: Cheryll Santiago

Change affects whole product family?	No
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Part #'s affected (See attached if entire product family is affected)

597-3327-502F/-507F, 597-3907-502F/-507F, 597-2603-502F/507F, 597-2323-502F/507F, 597-2903-502F/507F, 597-3322-502F/507F, 597-3602-502F/507F, 597-3902-502F/507F

Description of Change:

New LED Die material is higher brightness

Reason for Change:

Old LED Die is EOL

Properties of Old vs. Changed Product:

See Comparison sheets

Disposition of Old Product:

Deplete existing Stock on hand.

Expected Implementation Date:	Immediate
Customer Feedback Expected by:	Not Applicable

Last Time Buy Date: **Not Applicable**
See inventory tab

Additional Comments: (Include Potential Risks if Appropriate)

Replacement 0402 SMT LED is slightly different package shape (597-3327-502F/-507F and 597-3907-502F/-507F).

Supporting Qualification Data:

When Available upon request only.

Approved By:

(Minimum of three approvals are required.)

Vice President of Operations: _____
Vice President of Sales OED/Signals: _____
Director of Customer Service: _____
Vice President of Marketing: _____
Director of Quality: _____

NOTE: Expected Implementation date and Last Time Buy Date are estimated based on existing materials and consumption rates.
Subject to change.

LED COMPARISON TABLE									
P/N #1	PARAMETER	597-3322-502F/507F Old Die				597-3322-502F/507F New Die			
PARAMETERS		OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
		If	MIN	TYP	MAX	If	MIN	TYP	MAX
	LUMINOUS INTENSITY (mcd)	20mA	56	140	360	20mA	140	360	900
	FORWARD VOLTAGE (V)	20mA		3.2V	4.0V	20mA		3.2V	4.0V
	DOMINANT WAVELENGTH (nm)		520	525	535			525	
	VIEWING ANGLE 2 1/2 (deg)	110				110			
	REVERSE CURRENT (uA)	100uA, (Vr=5V)				100uA, (Vr=5V)			
RATING / CHARACTERISTICS		ABSOLUTE MAXIMUM RATINGS @ TA=25° C				ABSOLUTE MAXIMUM RATINGS @ TA=25° C			
	POWER DISSIPATION (mW)	84				84			
	PEAK PULSE FORWARD CURRENT(mA)	100				100			
	CONTINUOUS FORWARD CURRENT (mA)	20				20			
	REVERSE VOLTAGE	5V				5V			
	OPERATING TEMP. RANGE (C°)	-30C to +85C				-30C to +85C			
	STORAGE TEMP. RANGE (C°)	-40C to +100C				-40C to +100C			
	LEAD Reflow SOLDERING TEMP. (C°)	250C 10 sec				250C 10 sec			
PART SPEC / DIMENSION	Package Size	3.0 x 2.0 x 1.3mm (.118" x .079" x .051")				3.0 x 2.0 x 1.3mm (.118" x .079" x .051")			
	LED EMITTING COLOR	Green				Green			
	LED EPOXY COLOR	water clear				water clear			
	LED LEADS	SMT, 2 pins				SMT, 2 pins			
	LED DIE TECHNOLOGY	InGaN				InGaN			
	MOISTURE SENSITIVITY LEVEL	3				3			
	Packaging	2500 / reel				2500 / reel			
P/N #2	PARAMETER	597-3602-502F/507F Old Die				597-3602-502F/507F New Die			
PARAMETERS		OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
		If	MIN	TYP	MAX	If	MIN	TYP	MAX
	LUMINOUS INTENSITY (mcd)	20mA	36	100		20mA	90	250	560
	FORWARD VOLTAGE (V)	20mA		3.3V		20mA		3.2V	4.2V
	DOMINANT WAVELENGTH (nm)			470				470	
	VIEWING ANGLE 2 1/2 (deg)	110							
	REVERSE CURRENT (uA)	100uA (Vr=5V)				100uA (Vr=5V)			
RATING / CHARACTERISTICS		ABSOLUTE MAXIMUM RATINGS @ TA=25° C				ABSOLUTE MAXIMUM RATINGS @ TA=25° C			
	POWER DISSIPATION (mW)	84				78			
	PEAK PULSE FORWARD CURRENT(mA)	100mA				100mA			
	CONTINUOUS FORWARD CURRENT (mA)	20mA				20mA			
	REVERSE VOLTAGE	5V				5V			
	OPERATING TEMP. RANGE (C°)	-30C to +85C				-30C to +85C			
	STORAGE TEMP. RANGE (C°)	-40C to +100C				-40C to +100C			
	LEAD Reflow SOLDERING TEMP. (C°)	250C 10 sec				250C 10 sec			
PART SPEC / DIMENSION	Package Size	3.0 x 2.0 x 1.3mm (.118" x .079" x .051")				3.0 x 2.0 x 1.3mm (.118" x .079" x .051")			
	LED EMITTING COLOR	Blue				Blue			
	LED EPOXY COLOR	water clear				water clear			
	LED LEADS	SMT, 2 pins				SMT, 2 pins			
	LED DIE TECHNOLOGY	InGaN				InGaN			
	MOISTURE SENSITIVITY LEVEL	3				3			
	Packaging	2500 / reel				2500 / reel			
P/N #3	PARAMETER	597-3902-502F/507F Old Die				597-3902-502F/507F New Die			
PARAMETERS		OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
		If	MIN	TYP	MAX	If	MIN	TYP	MAX
	LUMINOUS INTENSITY (mcd)	20mA	360	900		20mA	900	1700	2200
	FORWARD VOLTAGE (V)	20mA		3.2V	4.3V	20mA	2.6V	3.1V	3.8V
	DOMINANT WAVELENGTH (nm)		x=0.30, y=0.30 typ				x=0.30, y=0.28 typ		
	VIEWING ANGLE 2 1/2 (deg)	110				110			
	REVERSE CURRENT (uA)	100uA (Vr=5V)							
RATING / CHARACTERISTICS		ABSOLUTE MAXIMUM RATINGS @ TA=25° C				ABSOLUTE MAXIMUM RATINGS @ TA=25° C			
	POWER DISSIPATION (mW)	84				95mW			
	PEAK PULSE FORWARD CURRENT(mA)	100mA				100mA			
	CONTINUOUS FORWARD CURRENT (mA)	20mA				25mA			
	REVERSE VOLTAGE	5V				5V			
	OPERATING TEMP. RANGE (C°)	-30C to +85C				-40C to +85C			
	STORAGE TEMP. RANGE (C°)	-40C to +100C				-40C to +100C			
	LEAD Reflow SOLDERING TEMP. (C°)	250C 10 sec				250C 10 sec			
PART SPEC / DIMENSION	Package Size	3.0 x 2.0 x 1.3mm (.118" x .079" x .051")				3.0 x 2.0 x 1.3mm (.118" x .079" x .051")			
	LED EMITTING COLOR	White				White			
	LED EPOXY COLOR	water clear				water clear			
	LED LEADS	SMT, 2 pins				SMT, 2 pins			
	LED DIE TECHNOLOGY	InGaN				InGaN			
	MOISTURE SENSITIVITY LEVEL	3				3			

LED COMPARISON TABLE									
P/N #1	PARAMETER	597-2603-502F/507F Old Die				597-2603-502F/507F New Die			
PARAMETERS		OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
		If	MIN	TYP	MAX	If	MIN	TYP	MAX
	LUMINOUS INTENSITY (mcd)	20mA	56	140		20mA	56	140	360
	FORWARD VOLTAGE (V)	20mA		3.2V		20mA		3.2V	4.2V
	DOMINANT WAVELENGTH (nm)			470			465	470	475
	VIEWING ANGLE 2 1/2 (deg)	140				140			
	REVERSE CURRENT (uA)	100uA, (Vr=5V)				10uA (Vr=5V)			
RATING / CHARACTERISTICS		ABSOLUTE MAXIMUM RATINGS @ TA=25° C				ABSOLUTE MAXIMUM RATINGS @ TA=25° C			
	POWER DISSIPATION (mW)	84				84			
	PEAK PULSE FORWARD CURRENT(mA)	100				100			
	CONTINUOUS FORWARD CURRENT (mA)	20				20			
	REVERSE VOLTAGE	5V				5V			
	OPERATING TEMP. RANGE (C°)	-30C to +85C				-40C to +85C			
	STORAGE TEMP. RANGE (C°)	-40C to +100C				-40C to +100C			
	LEAD Reflow SOLDERING TEMP. (C°)	260C				260C			
PART SPEC / DIMENSION	Package Size	1.6 x 1.15 x 0.55mm (0605) Side View				1.6 x 1.15 x 0.55mm (0605) Side View			
	LED EMITTING COLOR	Blue				Blue			
	LED EPOXY COLOR	water clear				water clear			
	LED LEADS	SMT, 2 pins				SMT, 2 pins			
	LED DIE TECHNOLOGY	InGaN				InGaN			
	MOISTURE SENSITIVITY LEVEL	3				3			
	Packaging	3000 pcs / reel, 7" reel				3000 pcs / reel, 7" reel			
P/N #2	PARAMETER	597-2323-502F/507F Old Die				597-2323-502F/507F New Die			
PARAMETERS		OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
		If	MIN	TYP	MAX	If	MIN	TYP	MAX
	LUMINOUS INTENSITY (mcd)	5mA	22	56	140	5mA	56	140	220
	FORWARD VOLTAGE (V)	5mA		3.0V	3.4V	5mA		3.0V	3.4V
	DOMINANT WAVELENGTH (nm)			527			520	527	535
	VIEWING ANGLE 2 1/2 (deg)	130				130			
	REVERSE CURRENT (uA)	100uA (Vr=5V)				10uA (Vr=5V)			
RATING / CHARACTERISTICS		ABSOLUTE MAXIMUM RATINGS @ TA=25° C				ABSOLUTE MAXIMUM RATINGS @ TA=25° C			
	POWER DISSIPATION (mW)	68				70			
	PEAK PULSE FORWARD CURRENT(mA)	100mA				100mA			
	CONTINUOUS FORWARD CURRENT (mA)	20mA				20mA			
	REVERSE VOLTAGE	5V				5V			
	OPERATING TEMP. RANGE (C°)	-40C to +85C				-40C to +100C			
	STORAGE TEMP. RANGE (C°)	-40C to +100C				-40C to +100C			
	LEAD Reflow SOLDERING TEMP. (C°)	260C 5 sec				260C 5 sec			
PART SPEC / DIMENSION	Package Size	1.6 x 1.15 x 0.55mm (0605) Side View				1.6 x 1.15 x 0.55mm (0605) Side View			
	LED EMITTING COLOR	Green				Green			
	LED EPOXY COLOR	water clear				water clear			
	LED LEADS	SMT, 2 pins				SMT, 2 pins			
	LED DIE TECHNOLOGY	InGaN				InGaN			
	MOISTURE SENSITIVITY LEVEL	3				3			
	Packaging	3000 pcs / reel, 7" reel				3000 pcs / reel, 7" reel			
P/N #3	PARAMETER	597-2903-502F/507F Old Die				597-2903-502F/507F New Die			
PARAMETERS		OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
		If	MIN	TYP	MAX	If	MIN	TYP	MAX
	LUMINOUS INTENSITY (mcd)	10mA	85	170		5mA	22	56	140
	FORWARD VOLTAGE (V)	10mA		3.1V		5mA		2.9V	3.3V
	DOMINANT WAVELENGTH (nm)	Chromaticity Coordinates	x=0.31 / y=0.31			Chromaticity Coordinates	x=0.30 / y=0.30		
	VIEWING ANGLE 2 1/2 (deg)	150				150			
	REVERSE CURRENT (uA)	100uA (Vr=5V)				10uA (Vr=5V)			
RATING		ABSOLUTE MAXIMUM RATINGS @ TA=25° C				ABSOLUTE MAXIMUM RATINGS @ TA=25° C			
	POWER DISSIPATION (mW)	74				33mW			

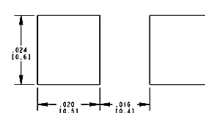
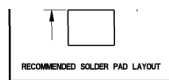
G / CHARACTERISTICS	PEAK PULSE FORWARD CURRENT(mA)	100mA	50mA
	CONTINUOUS FORWARD CURRENT (mA)	20mA	10mA
	REVERSE VOLTAGE	5V	5V
	OPERATING TEMP. RANGE (C°)	-40C to +85C	-40C to +85C
	STORAGE TEMP. RANGE (C°)	-40C to +100C	-40C to +100C
	LEAD Reflow SOLDERING TEMP. (C°)	260C 5 sec	260C 5 sec
PART SPEC / DIMENSION	Package Size	1.6 x 1.15 x 0.55mm (0605) Side View	1.6 x 1.15 x 0.55mm (0605) Side View
	LED EMITTING COLOR	White	White
	LED EPOXY COLOR	Phosphor	Phosphor
	LED LEADS	SMT, 2 pins	SMT, 2 pins
	LED DIE TECHNOLOGY	InGaN	InGaN
	MOISTURE SENSITIVITY LEVEL	3	3
Packaging		3000 pcs / reel, 7" reel	3000 pcs / reel, 7" reel
Old Drawing		New Drawing	

LED COMPARISON TABLE

P/N #1	PARAMETER	597-3327-502F/-507F OLD DIE				597-3327-502F/-507F NEW DIE			
PARAMETERS		OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
		If	MIN	TYP	MAX	If	MIN	TYP	MAX
	LUMINOUS INTENSITY (mcd)	5mA	56	110		5mA	56	110	220
	FORWARD VOLTAGE (V)	5mA		3.0V		5mA	1.7V	3.0V	3.4V
	DOMINANT WAVELENGTH (nm)		520	527	535		520	527	535
	VIEWING ANGLE 2 1/2 (deg)		135				135		
	REVERSE CURRENT (uA)		100				100		
RATING / CHARACTERISTICS		ABSOLUTE MAXIMUM RATINGS @ TA=25° C				ABSOLUTE MAXIMUM RATINGS @ TA=25° C			
	POWER DISSIPATION (mW)		33mW				34mW		
	PEAK PULSE FORWARD CURRENT(mA)		50mA				50mA		
	CONTINUOUS FORWARD CURRENT (mA)		10mA				10mA		
	REVERSE VOLTAGE		5V				5V		
	OPERATING TEMP. RANGE (C°)		-40C to +85C				-40C to +85C		
	STORAGE TEMP. RANGE (C°)		-40C to +100C				-40C to +100C		
	LEAD Reflow SOLDERING TEMP. (C°)		260C				260C		
PART SPEC / DIMENSION	Package Size	1.0 x 0.6 x 0.2mm (.039" x .024" x .008")				1.0 x 0.6 x 0.2mm (.039" x .024" x .008")			
	LED EMITTING COLOR	Green				Green			
	LED EPOXY COLOR	water clear				white diffused			
	LED LEADS	SMT, 2 pins				SMT, 2 pins			
	LED DIE TECHNOLOGY	InGaN				InGaN			
	MOISTURE SENSITIVITY LEVEL	3				3			
	Packaging	5000 pcs / reel, 7" reel				5000 pcs / reel, 7" reel			

P/N #2	PARAMETER	597-3907-502F/-507F OLD DIE				597-3907-502F/-507F NEW DIE			
PARAMETERS		OPERATING CHARACTERISTICS @ 25° AMBIENT				OPERATING CHARACTERISTICS @ 25° AMBIENT			
		If	MIN	TYP	MAX	If	MIN	TYP	MAX
	LUMINOUS INTENSITY (mcd)	5mA	90	150		5mA	90	180	360
	FORWARD VOLTAGE (V)	5mA		2.9V		5mA	1.9V	2.9V	3.3V
	DOMINANT WAVELENGTH (nm)	X,Y		0.30,0.30		X,Y		0.30, 0.30	
	VIEWING ANGLE 2 1/2 (deg)		135				135		
	REVERSE CURRENT (uA)		100				100		
RATING / CHARACTERISTICS		ABSOLUTE MAXIMUM RATINGS @ TA=25° C				ABSOLUTE MAXIMUM RATINGS @ TA=25° C			
	POWER DISSIPATION (mW)		33mW				33mW		
	PEAK PULSE FORWARD CURRENT(mA)		50mA				50mA		
	CONTINUOUS FORWARD CURRENT (mA)		10mA				10mA		
	REVERSE VOLTAGE		5V				5V		
	OPERATING TEMP. RANGE (C°)		-40C to +85C				-40C to +85C		
	STORAGE TEMP. RANGE (C°)		-40C to +100C				-40C to +100C		
	LEAD Reflow SOLDERING TEMP. (C°)		260C				260C		
PART SPEC / DIMENSION	Package Size	1.0 x 0.6 x 0.2mm (.039" x .024" x .008")				1.0 x 0.6 x 0.2mm (.039" x .024" x .008")			
	LED EMITTING COLOR	White				White			
	LED EPOXY COLOR	white diffused				white diffused			
	LED LEADS	SMT, 2 pins				SMT, 2 pins			
	LED DIE TECHNOLOGY	InGaN				InGaN			
	MOISTURE SENSITIVITY LEVEL	3				3			
	Packaging	5000 pcs / reel, 7" reel				5000 pcs / reel, 7" reel			

Old Drawing



Part # list (with dashes)	Part # list
597-3327-502F	5973327502F
597-3327-507F	5973327507F
597-3907-502F	5973907507F
597-3907-507F	5973907502F
597-2603-507F	5972603507F
597-2603-502F	5972603502F
597-2323-502F	5972323502F
597-2323-507F	5972323507F
597-2903-507F	5972903507F
597-2903-502F	5972903502F
597-3322-502F	5973322507F
597-3322-507F	5973322502F
597-3602-502F	5973602502F
597-3602-507F	5973602507F
597-3902-502F	5973902502F
597-3902-507F	5973902507F