



# Product Change Notification

PCN # 87167

Issued Date: OCT 21,2021

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Change affects whole product family? No

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

5218012F,5513307F,5513307802F,5530700847F,5680700820F,  
5513307MF,5513307802MF,5530700847MF

**Description of Change:**

LED change to brighter Blue Dice and Green Dice increasing LED intensity. LED Leads are Matte Tin plated. OBSOLETE MF ending P/ns since plating is matte tin only for the new Leds.

**Reason for Change:**

LED dice source halted production of old dice and replacement dice B/G are much brighter and External Leads are matte tin Finish.

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

See Comparison sheet

**Disposition of Old Product:**

Deplete existing Stock on hand.

<b>Expected Implementation Date:</b>	<u>Immediate</u>	<b>Last Time Buy Date:</b>	
<b>Customer Feedback Expected by:</b>	<u>Not Applicable</u>	<b>Not Applicable</b>	<u>Not Applicable</u>

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

This 3mm LED B/G remains the same with same mechanical physical dimensions as the EOL part. Package is form, fit, the same but brighter with 100 degree viewing angle

**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 rate. Subject to change.**

**AFFECTED END PRODUCT PART NUMBERS**

3mm B/G Bi Color Led

DESCRIPTION

OLD REV

## REPLACEMENT

5218012F	3MM G/B BI-COLOR LED	REV A	OBSOLETE USE 5218012F
5513307F	3MM CBI RT ANGLE B/G	REV C	OBSOLETE USE 5513307F
5513307802F	3MM CBI .200"CL B/G	REV A	OBSOLETE USE 5513307802F
5530700847F	3MM BI-LEVEL CBI B/G-B/G	REV A	OBSOLETE USE 5530700847F
5680700820F	3MM QD LV G/B,G/B,G/B,G/B	REV A	OBSOLETE USE 5680700820F

## EOL PART NUMBERS

## REPLACEMENT

5513307MF	3MM CBI RT ANGLE B/G MF	REV A	OBSOLETE P/N USE 5513307F above
5513307802MF	3MM CBI .200"CL B/G MF	REV A	OBSOLETE P/N USE 5513307802F above
5530700847MF	3MM BI-LEVEL CBI B/G-B/G MF	REV A	OBSOLETE P/N USE 5530700847F above

NEW REV

REV A1  
REV C1  
REV A1  
REV A1  
REV A1

## LED COMPARISON TABLE

P/N	PARAMETER	521-8012F REV A 3MM B/G Bi color EOL DICE	521-8012F 3mm B/G Bi color BRIGHTER REPLACEMENT
<b>PARAMETERS</b>		<b>OPERATING CHARACTERISTICS @ 25° AMBIENT</b>	<b>OPERATING CHARACTERISTICS @ 25° AMBIENT</b>
		If      MIN      TYP      MAX	If      MIN      TYP      MAX
	LUMINOUS INTENSITY GREEN (mcd)	20ma    6.5    14	20ma    30    60    140
	LUMINOUS INTENSITY BLUE (mcd)	3.8    8.5	65    140    310
	FORWARD VOLTAGE GREEN (V)	2.1    2.5	1.6    2.1    2.5
	FORWARD VOLTAGE BLUE (V)	4.0    4.8	2.6    3.2    3.8
	PEAK WAVELENGTH GREEN (nm)	565	574
	PEAK WAVELENGTH BLUE (nm)	428	468
	DOMINANT WAVELENGTH GREEN (nm)	569	566    570    578
	DOMINANT WAVELENGTH BLUE (nm)	470	460    470    475
VIEWING ANGLE 2θ1/2 (deg)	60	100	
REVERSE CURRENT (micro amps) Vr=5v	100 µA @5V	100 µA @5V	
<b>RATING &amp; CHARACTERISTICS</b>		<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>	<b>ABSOLUTE MAXIMUM RATINGS @ TA=25° C</b>
	POWER DISSIPATION GREEN (mW)	75	120
	POWER DISSIPATION BLUE (mW)	100	120
	PEAK PULSE FORWARD CURRENT(mA) GREEN	90	90
	PEAK PULSE FORWARD CURRENT(mA) BLUE	50	120
	DC FORWARD CURRENT GREEN (mA)	30	30
	DC FORWARD CURRENT BLUE (mA)	20	120
	DERATING LINERALLY FROM °C (mA/C°) GREEN	(50°) 0.4	(45°) 0.56
	DERATING LINERALLY FROM °C (mA/C°) BLUE	(30°) 0.3	(30°) 0.46
	OPERATING TEMP. RANGE (C°)	-20 TO + 80	-40 to + 85
STORAGE TEMP. RANGE (C°)	-30 TO + 100	-40 to + 100	
LEAD SOLDERING TEMP. (C°) 2mm(.078") from Body	260C	260C	
<b>DIMENSIONS</b>	<b>3MM Thru Hole BLUE/GREEN BI COLOR LED</b>	.126"(3.2mm)Flange (.118"(3.0mm) Body x .175"(4.45mm)long body	.126"(3.2mm)Flange (.118"(3.0mm) Body x .175"(4.45mm)long body
	<b>LED EMITTING COLORS</b>	BLUE and GREEN	BLUE and GREEN
	<b>LED EPOXY COLOR</b>	White Diffused	White Diffused
	<b>LED LEADS</b>	Matte Tin Finish	Matte Tin Finish
	<b>LED DIE TECHNOLOGY GREEN</b>	ALINGaP	ALINGaP
<b>LED DIE TECHNOLOGY BLUE</b>	InGaN	InGaN	