



Product Change Notification

PCN # 86404

Issued Date: 12/16/2021

Issued By: Nick Oesterheld

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Change affects whole product family?

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

SEE ATTACHED AFFECTED P/N LIST

Description of Change:

5MM RED DIFFUSED AND AMBER-ORANGE DIFFUSED ARE EOL AND REPLACED BY SIMILAR LEDS WITH LIGHTER TINTED EPOXY IN THE OFF STATE .THESE LEDS ARE A LITTLE BRIGHTER AND FORM FIT THE SAME. 5MM GREEN DIFFUSED AND YELLOW DIFFUSED CBIs ARE EOL AND REPLACED WITH SIMILAR CBIs AIREADY AVAILABLE WITH LIGHTER TINTED EPOXY IN THE OFF STATE AND LITTLE BRIGHTER.

Reason for Change:

LED 5mm Red Diffused used in CBIs as well as the 5mm Amber Orange Diffused LED are EOL no dice material available. Replace with a little brighter and lighter tinted LEDs. The 5mm GREEN and 5mm YELLOW CBIs are EOL as well.

Properties of Old vs. Changed Product:

SEE ATTACHED COMPARISON TABLES OF REPLACEMENT LEDS and CBIs

Disposition of Old Product:

Deplete Stock and use replacement CBIs

Expected Implementation Date:

Last Time Buy Date: 1-

Customer Feedback Expected by:

Additional Comments: (Include Potential Risks if Appropriate)

Diffused Tinted Epoxy on Leds a little lighter color in the off state.

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: _____

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.

5505304F
5505304004F
5505305F
5505305003F
5505305004F
5505307F
5505307002F
5505307004F
5505307014F
5505307100F
5505307801F
5505308F
5505312F
5520813F
5520823F
5520831F
5520832F
5520833F
5595301001F
5595301003F
5595301007F
5595301017F
5595301023F
5595301027F
5595301802F
5595301803F
5595301805F
5595301808F
5595301809F
5590002801F
5615301050F
5615301060F
5615301070F
5615301080F
5615301090F
5615301100F

5502304F
5502304004F
5502305F
5502305003F
5502305004F
5502307F
5502307002F
5502307004F
5502307014F
5502307100F
5502307801F
5502308F
5502312F
5520213F
5520223F
5520231F
5520232F
5520233F
5592301001F
5592301003F
5592301007F
5592301017F
5592301023F
5592301027F
5595301802NF
5595301803NF
5595301805NF
5595301808NF
5595301809NF
5590002801NF
5612301050F
5612301060F
5612301070F
5612301080F
5612301090F
5612301100F

RED Notation indicates new P/N assignment

LED COMPARISON TABLE

PARAMETERS	5mm ORANGE DIFFUSED Tinted REPLACEMENT LED For CBIs			5mm ORANGE DIFFUSED Tinted EOL LED				
	CONDITIONS	MIN	TYP	MAX	CONDITIONS	MIN	TYP	MAX
CHARACTERISTICS	LUMINOUS INTENSITY (mcd)	10	50	140	IF = 20 mA; Ts = 25°C	17	34	
	FORWARD VOLTAGE (V)		2.1	2.6		2.2	3	
	PEAK WAVELENGTH (nm)		610			610		
	DOMINANT WAVELENGTH (nm)		602					
	VIEWING ANGLE 2θ1/2 (deg)		50			50		
	REVERSE CURRENT (µA) Vr = 5v			10			10	
MAXIMUM RATINGS	FORWARD CURRENT (mA)	20			25			
	SURGE CURRENT (mA) t ≤ 10 µs; D = 0.005 ; Ts = 25 °C	80			60			
	REVERSE VOLTAGE (Ts = 25°C)	5			3			
	OPERATING TEMP. RANGE (C°)	-40 TO +100			-25 to +85			
	STORAGE TEMP. RANGE (C°)	-40 TO +100			-30 to + 100			
	Power Dissipation (MW)	60			75			
DIMENSIONS	THRU HOLE 5mm DIA	5mm(.197" DIA) x 8.6mm (.340"LG)			5mm(.197" DIA) x 8.6mm (.340"LG)			
	LED EMITTING COLOR	ORANGE DIFFUSED			ORANGE DIFFUSED			
	LED EPOXY COLOR	ORANGE DIFFUSED			ORANGE DIFFUSED			
	LED DIE TECHNOLOGY	InGaAlP			GaAsP/GaP			

LED COMPARISON TABLE

PARAMETERS	5mm RED DIFFUSED (S519441F) Replacement LED for CBIs				5mm RED DIFFUSED 521-9441F EOL LED				
	CONDITIONS	MIN	TYP	MAX	CONDITIONS	MIN	TYP	MAX	
CHARACTERISTICS	LUMINOUS INTENSITY (mcd)	IF = 10 mA; Ts = 25°C	5.6	19		IF = 20 mA; Ts = 25°C	17	34	
	FORWARD VOLTAGE (V) @ 20ma			2.0	2.6			2.1	2.55
	PEAK WAVELENGTH (nm)			635				650	
	DOMINANT WAVELENGTH (nm)			623				?	
	VIEWING ANGLE 2θ1/2 (deg)			50				50	
	REVERSE CURRENT (µA) Vr = 5v				100				10
MAXIMUM RATINGS	FORWARD CURRENT (mA)	30			25				
	SURGE CURRENT (mA) t ≤ 10 µs; D = 0.005 ; Ts = 25 °C	90			60				
	REVERSE VOLTAGE (Ts = 25°C)	5			3				
	OPERATING TEMP. RANGE (C°)	-55 TO +100			-55 to +100				
	STORAGE TEMP. RANGE (C°)	-55 TO +100			-55 to + 100				
	Power Dissipation (MW)	90			75				
DIMENSIONS	THRU HOLE 5MM DIA	5.0(.197"DIA) x 8.6 (.340"LG)			5mm(.197" DIA) x 8.6mm (.340"LG)				
	LED EMITTING COLOR	RED DIFFUSED			RED DIFFUSED				
	LED EPOXY COLOR	RED DIFFUSED lighter epoxy in off state			RED DIFFUSED				
	LED DIE TECHNOLOGY	AlInGaP			GaAs				

LED COMPARISON TABLE

PARAMETERS		5 mm GREEN DIFFUSED 5219270F REPLACEMENT LED FOR CBIs			5 mm GREEN DIFFUSED 5219456F EOL LED					
		CONDITIONS	MIN	TYP	MAX	CONDITIONS	MIN	TYP	MAX	
CHARACTERISTICS	LUMINOUS INTENSITY (mcd)	IF = 10 mA; Ts = 25°C	8.7	19	100	IF = 20 mA; Ts = 25°C	17	34		
	FORWARD VOLTAGE (V) @v20ma			2.1	2.6			2.2	3.0	
	PEAK WAVELENGTH (nm)			565				563		
	DOMINANT WAVELENGTH (nm)			566	569		573			
	VIEWING ANGLE 2θ1/2 (deg)				50				50	
	REVERSE CURRENT (µA) Vr = 5v						100			10
MAXIMUM RATINGS	FORWARD CURRENT (mA)		30				25			
	SURGE CURRENT (mA) t ≤ 10 µs; D = 0.005 ; Ts = 25 °C		120				60			
	REVERSE VOLTAGE (Ts = 25°C)		5				3			
	OPERATING TEMP. RANGE (C°)		-55 TO +100				-55 to +100			
	STORAGE TEMP. RANGE (C°)		-55 TO +100				-55 to +100			
	Power Dissipation (mW)		100				75			
	DIMENSIONS	THRU HOLE 5mm DIA		5mm(.197" DIA) x 8.6mm (.340"LG)				5mm(.197" DIA) x 8.6mm (.340"LG)		
LED EMITTING COLOR			GREEN DIFFUSED				GREEN DIFFUSED			
LED EPOXY COLOR			GREEN DIFFUSED LIGHTER EPOXY IN OFF STATE				GREEN DIFFUSED			
LED DIE TECHNOLOGY			InGaAlP				GaP			

LED COMPARISON TABLE

PARAMETERS		5 mm YELLOW DIFFUSED S219248F REPLACEMENT LED FOR CBIs			5 mm YELLOW DIFFUSED S219455F EOL LED					
		CONDITIONS	MIN	TYP	MAX	CONDITIONS	MIN	TYP	MAX	
CHARACTERISTICS	LUMINOUS INTENSITY (mcd)	IF = 10 mA; Ts = 25°C	8.7	29	100	IF = 20 mA; Ts = 25°C	17	34		
	FORWARD VOLTAGE (V)			2.1	2.6			2.2	3	
	PEAK WAVELENGTH (nm)			585				585		
	DOMINANT WAVELENGTH (nm)			580	590		595			
	VIEWING ANGLE 2 θ 1/2 (deg)				50				50	
	REVERSE CURRENT (μ A) Vr = 5v						100			
MAXIMUM RATINGS	FORWARD CURRENT (mA)		20			25				
	SURGE CURRENT (mA) t \leq 10 μ s; D = 0.005 ; Ts = 25 °C		60			60				
	REVERSE VOLTAGE (Ts = 25°C)		5			3				
	OPERATING TEMP. RANGE (C°)		-55 TO +100			-55 to +100				
	STORAGE TEMP. RANGE (C°)		-55 TO +100			-55 to + 100				
	Power Dissipation (MW)		60			75				
DIMENSIONS	THRU HOLE 5mm DIA		5mm(.197" DIA) x 8.6mm (.340"LG)			5mm(.197" DIA) x 8.6mm (.340"LG)				
	LED EMITTING COLOR		YELLOW DIFFUSED			YELLOW DIFFUSED				
	LED EPOXY COLOR		YELLOW DIFFUSED LIGHTER EPOXY IN OFF STATE			YELLOW DIFFUSED				
	LED DIE TECHNOLOGY		AlInGaP			GaAsP/GaP				