



# MULTI SMD RGB LED

VLMRGB343.. Series



## High-Brightness Tri-Color SMD LED in PLCC-4 Package

### FEATURES

- Black surface
- AEC-Q101 automotive qualified
- Qualified according to JEDEC moisture sensitivity level 2
- Compatible with IR reflow soldering
- Environmentally friendly; RoHS-compliant
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

### BENEFITS

- Separate control of red, green, and blue LED chips
- High brightness
- Eight available device options with various combinations of luminous intensity per color to suit a wide range of applications

### APPLICATIONS

- Accent and decorative lighting
- Full-color message and video display boards
- Backlight for LCDs, PDAs, TVs, and other consumer electronics
- White goods, including home appliances such as conventional and microwave ovens, washing machines, and dryers

Datasheet is available on our web site at [www.vishay.com](http://www.vishay.com)  
for VLMRGB343.. Series - <http://www.vishay.com/doc?81742>



Multi SMD RGB LED

OPTICAL AND ELECTRICAL CHARACTERISTICS <sup>1)</sup> VLMRGB343..., RED, TRUE GREEN, BLUE											
Parameter	Test Condition	Part	Floating Groups	Color	Symbol	Min.	Typ.	Max.	Unit		
Luminous Intensity	$I_F = 20 \text{ mA}$	VLMRGB343-ST-UV-RS		Red	$I_V$	140		285	mcd		
				True green		285		560			
				Blue		100		200			
		Luminous Intensity	$I_F = 20 \text{ mA}$	VLMRGB343	S3U3R3	Red	$I_V$	140		200	mcd
						True green		285		400	
						Blue		100		140	
					S3U3S3	Red	$I_V$	140		200	mcd
						True green		285		400	
						Blue		100		200	
					S3V3R3	Red	$I_V$	140		200	mcd
						True green		400		560	
						Blue		100		140	
				S3V3S3	Red	$I_V$	140		200	mcd	
					True green		400		560		
					Blue		100		200		
				T3U3R3	Red	$I_V$	200		285	mcd	
					True green		285		400		
					Blue		100		140		
				T3U3S3	Red	$I_V$	200		285	mcd	
					True green		285		400		
					Blue		140		200		
				T3V3R3	Red	$I_V$	200		285	mcd	
					True green		400		560		
					Blue		100		140		
				T3V3S3	Red	$I_V$	200		285	mcd	
					True green		400		560		
					Blue		140		200		
Dominant Wavelength	$I_F = 20 \text{ mA}$			VLMRGB343..		Red	$\lambda_d$	618	625	628	nm
						True green		521	526	536	
						Blue		465	470	475	
Angle of Half Intensity	$I_F = 20 \text{ mA}$	VLMRGB343..			Red	$\phi$		$\pm 60$		deg	
					True green						
					Blue						
Forward Voltage	$I_F = 20 \text{ mA}$		VLMRGB343..			Red	$V_F$		1.8	2.45	V
						True green			3.7	4.25	
						Blue			3.6	4.25	

Note: Not designed for reverse direction.

1)  $T_{amb} = 25 \text{ }^\circ\text{C}$ , unless otherwise specified.

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