

# SLR-343 Series

#### **Features**

- ·Viewing angle 2 $\theta$  1/2 : 40 $^{\circ}$
- ·Competent to direct mount











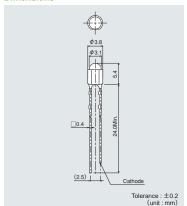
#### **Specifications**

Viewing angle 20 1/2/40°: Standard

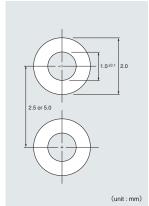
viewing angle 28 1/2 / 40 .	Turidara			A1	1 4 . 14 . 1	D	(T05°0)			EL					(T: -0	c°O \	
	Chip	Emitting	-				s (Ta=25℃)	0	Forward				tical Characte Dominant Wav				noite d
Part No.	Structure	Color	Power Dissipation PD(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)		IF(mA)				IF(mA)		Typ. (mcd)	
SLR-343VR		Red											630		5.6	16	
SLR-343VC		Reu							2.0				630		9.0	25	
SLR-343DU	GaAsP	0	60	20					2.0				605		5.6	16	
SLR-343DC	on GaP	Orange	60	20									605		9.0	25	
SLR-343YY		Yellow			60*1	3	-25 to +85	-30 to +100		10	10	3	587	10	3.6	10	10
SLR-343YC		reliow			60*1	3	-25 10 +65	-30 10 +100		10	10	3	307	10	5.6	16	10
SLR-343MG									2.1				572		5.6	10	
SLR-343MC	GaP	Green	75	25					2.1				5/2		9.0	25	
SLR-343PG	GaP	Green	/5	25									560		2.2	6.3	
SLR-343PC													200		2.2	6.3	
■SLR343ECT		Bluish	120	30					3.3				527		900	2200	
SLR343EC4T		Green	120	30					3.2				525		420	1500	
SLR343BCT	InCoNI		120	30	100*2	E	20 to 180	20 to 1100	3.3	20	100	_		20	200	600	20
SLR343BC7T	InGaN	Blue	105	25	100*2	5	-20 to +80	-30 to +100		20	100	5	470	20	220	470	20
SLR343BC4T			120	30					3.2						200	470	
□SLR343WBC7T		White	105	25									(x, y) (0.31, 0.31)		330	680	

\*1:Duty1/5, 200Hz, \*2:Duty1/10, 1kHz

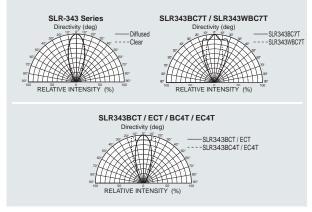
#### Dimensions



#### Recommended Solder Pattern

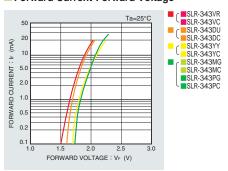


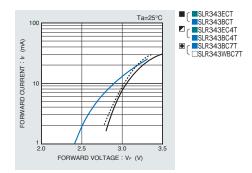
### Viewing Angle



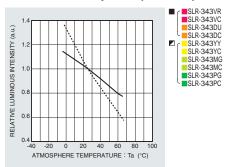
#### **Electrical Characteristics Curves**

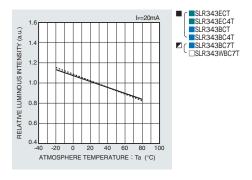
#### Forward Current-Forward Voltage



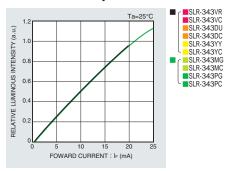


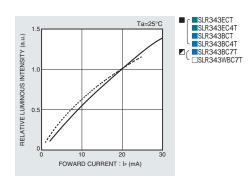
#### Luminous Intensity-Atmosphere Temperature



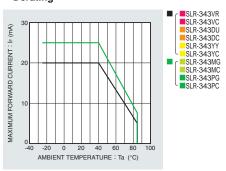


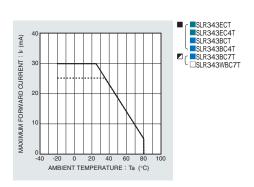
#### Luminous Intensity-Forward Current





#### Derating





#### **Rank Reference of Brightness**

#### Red (V)

															(1	Га=25°	C, IF=	10mA)
	Viewing	Brightness Rank	Е	F	G	Н	J	K	L	М	N	Р	Q	R	S	Т	U	V
	angle (2θ1/2)	Brightness (mcd)	0.40 to 0.63	0.63 to 1.0	1.0 to 1.6		2.5 to 4.0			10 to 16							250 to 400	
Ф3	40°	Transparent Colored									SLR-3	343VC						
Circular type	40	Diffused Colored								SLR-3	343VR							

#### Orange (D)

	- (- )														(1	Ta=25°	C, IF=	10mA)
	Viewing	Brightness Rank	Е	F	G	Н	J	K	L	М	N	Р	Q	R	S	Т	U	V
	angle (2θ1/2)	gle Brightnes (mcd		0.63 to 1.0			2.5 to 4.0				16 to 25	25 to 40		63 to 100			250 to 400	
Ф3	40°	Transparent Colored									SLR-3	43DC						
Circular type	40	Diffused Colored								SLR-3	343DU							

#### ■ Yellow (Y)

	(Ta=25°C, I <sub>F</sub> =10mA)															10mA)		
	Viewing	Brightness Rank	Е	F	G	Н	J	K	L	М	N	Р	Q	R	S	Т	U	V
	angle (2θ1/2)	Brightness (mcd) Resin Color	0.40 to 0.63											63 to 100			250 to 400	
ф3	40°	Transparent Colored							SLR-343YC									
Circular type	40	Diffused Colored						SLR-343YY										

#### Green (M, P)

_ Orecin	(141, 1	,													(1	Га=25°	C, IF=	10mA)
	Viewing	Brightness Rank	Е	F	G	Н	J	K	L	M	N	Р	Q	R	S	Т	U	V
	angle (2θ1/2)	Brightness (mcd)	0.40 to 0.63	0.63 to 1.0	1.0 to 1.6	1.6 to 2.5	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	400 to 630
		Transparent Colored									SLR-3	343MC						
ф3	40°	Diffused Colored								SLR-3	343MG							
Circular type	40	Diffused Colored						SLR-3	343PG									
		Transparent Colored						SLR-	343PC									

#### Bluish Green (E)

			. ,									(	Ta=25°	C, IF=	20mA)
	V	iewing	Brightness Rank	XH	XJ	XK	XL	XM	XN	XP	XQ	XR	XS	XT	XU
		angle 2θ1/2)	Brightness (mcd)	150 to 220	220 to 330	330 to 473	470 to 680	680 to 1000	1000 to 1500	1500 to 2200	2200 to 3300	3300 to 4700	4700 to 6800	6800 to 10000	10000 to 15000
ф3		40°	Transparent				10	SLR3	43EC4	Т					
Circular	Circular type 40		Colorless						3	SLR3	43EC	Γ			

#### Blue (B)

	,										(1	Га=25°	C, IF=	20mA)
	Viewing	Brightness Rank	XH	XJ	XK	XL	XM	XN	XP	XQ	XR	XS	XT	XU
	angle (2θ1/2)	Brightness (mcd)	150 to 220	220 to 330	330 to 473	470 to 680	680 to 1000	1000 to 1500	1500 to 2200	2200 to 3300	3300 to 4700	4700 to 6800	6800 to 10000	10000 to 15000
40		Transparent		;	SLR34	3BC71	Г							
φ3 Circular type	40°	Transparent Colorless		10	SLR3	43BC4	Т							
Circular type		Coloness			SLR3	43BC1	Г							

#### ■ White (WB)

	,									(1	īa=25°	C, IF=	20mA)
	Viewing	Brightness Rank	XJ	XK	XL	XM	XN	XP	XQ	XR	XS	XT	XU
	angle (2θ1/2)	Brightness (mcd) Resin Color	220 to 330	330 to 473	470 to 680	680 to 1000	1000 to 1500	1500 to 2200	2200 to 3300	3300 to 4700	4700 to 6800	6800 to 10000	10000 to 15000
φ3 Circular	40°	Transparent Colorless		s	LR343	WBC7	т						

 $\rm \divideontimes Brightness$  on specification sheet include tolerance of within  $\pm$  10%.

#### Part No. Construction \* "-" will be taken out for emitting color Special Code will be applied for Emitting color W/B/E series. W/B/E series. Chromaticity rank (for white LED)\* 3 3 Series name Package type Emitting Color Resin Color Taping specifications Rank sign (Brightness Rank)\* <Red> Diffused Colored <Orange> Diffused Colored V Red:630nm 3F 1-Element straight bulk See taping specifications D Orange:605nm Straight bulk(In case of white LED) 3 Yellow:587(590)nm <Yellow> Diffused Colored Straight taping(In case of white LED) Μ Yellowish-Green:572(563)nm <Green> Diffused Colored Transparent Colored Green:560nm Ε Bluish-Green:527(525)nm С Transparent Colorless В Blue:470nm Т WB White

- \* Concerning the Brightness rank
- Please refer to the rank chart above for luminous intensity classification.
   Part name is individual for each rank.
- When shipped as sample, the part name will be a representative part name. General products are free of ranks. Please contact sales if rank appointment is needed.

Downloaded from **Datasheet.su** 

#### Notes

- 1) The information contained herein is subject to change without notice.
- 2) Before you use our Products, please contact our sales representative and verify the latest specifications:
- 3) Although ROHM is continuously working to improve product reliability and quality, semiconductors can break down and malfunction due to various factors.

  Therefore, in order to prevent personal injury or fire arising from failure, please take safety measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-safe procedures. ROHM shall have no responsibility for any damages arising out of the use of our Poducts beyond the rating specified by ROHM.
- 4) Examples of application circuits, circuit constants and any other information contained herein are provided only to illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.
- 5) The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM or any other parties. ROHM shall have no responsibility whatsoever for any dispute arising out of the use of such technical information.
- 6) The Products are intended for use in general electronic equipment (i.e. AV/OA devices, communication, consumer systems, gaming/entertainment sets) as well as the applications indicated in this document.
- 7) The Products specified in this document are not designed to be radiation tolerant.
- 8) For use of our Products in applications requiring a high degree of reliability (as exemplified below), please contact and consult with a ROHM representative: transportation equipment (i.e. cars, ships, trains), primary communication equipment, traffic lights, fire/crime prevention, safety equipment, medical systems, servers, solar cells, and power transmission systems.
- 9) Do not use our Products in applications requiring extremely high reliability, such as aerospace equipment, nuclear power control systems, and submarine repeaters.
- 10) ROHM shall have no responsibility for any damages or injury arising from non-compliance with the recommended usage conditions and specifications contained herein.
- 11) ROHM has used reasonable care to ensur the accuracy of the information contained in this document. However, ROHM does not warrants that such information is error-free, and ROHM shall have no responsibility for any damages arising from any inaccuracy or misprint of such information.
- 12) Please use the Products in accordance with any applicable environmental laws and regulations, such as the RoHS Directive. For more details, including RoHS compatibility, please contact a ROHM sales office. ROHM shall have no responsibility for any damages or losses resulting non-compliance with any applicable laws or regulations.
- 13) When providing our Products and technologies contained in this document to other countries, you must abide by the procedures and provisions stipulated in all applicable export laws and regulations, including without limitation the US Export Administration Regulations and the Foreign Exchange and Foreign Trade Act.
- 14) This document, in part or in whole, may not be reprinted or reproduced without prior consent of ROHM



Thank you for your accessing to ROHM product informations. More detail product informations and catalogs are available, please contact us.

## **ROHM Customer Support System**

http://www.rohm.com/contact/