




SML-Z1 series

Actual size
 3528(1411)
 3.5×2.8mm(t=1.9mm)

Features

- High brightness
- 20/50mA guaranteed specifications
- PLCC2 package

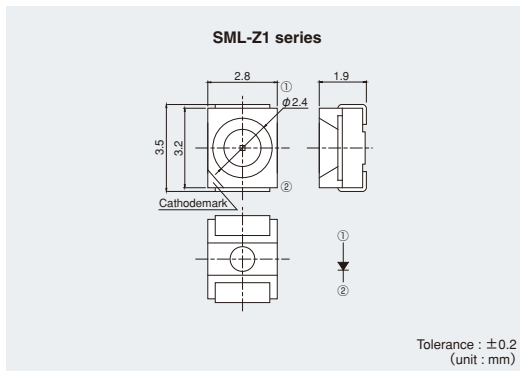


Specifications

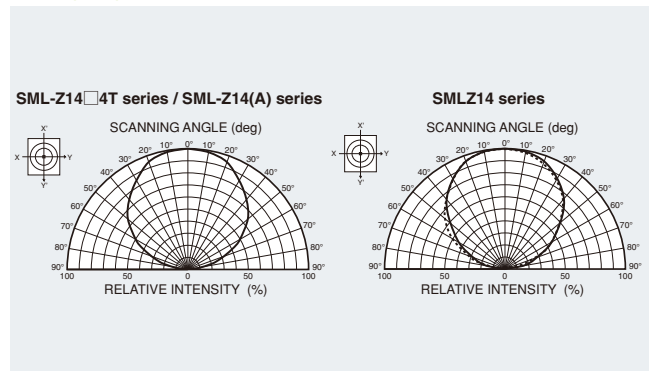
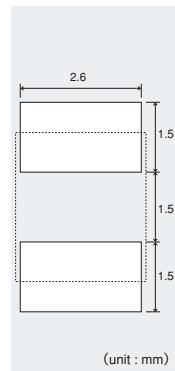
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)																		
			Power Dissipation Pd (mW)	Forward Current If (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage Vr (V)	Operating Temperature Topr (°C)	Storage Temperature Tsig (°C)	Forward Voltage V _F Typ. (V)	Forward Current I _F (mA)	Reverse Current I _R Max. (μA)	Reverse Voltage Vr (V)	Dominant Wavelength λ _D Min. (nm)	Typ. (nm)	Max. (nm)	Luminous Intensity I _v (mcd)	Min. (mcd)	Typ. (mcd)	I _F (mA)							
■ SML-Z14VT(A)	AlGaInP	Red	168	70	200*1	12	-40 to +100	-40 to +100	1.9				625	630	635	20	56	112								
■ SML-Z14UT(A)													615	620	625		112	224								
■ SML-Z14DT(A)													602	605	608		140	280								
■ SML-Z14YT(A)		Yellowish Green	175																							
■ SML-Z14MT(A)																				586	589	592	45	90		
■ SML-Z14FT(A)		Green																								
■ SML-Z14PT(A)																					568	571	574	22.4	45	
■ SML-Z14V4T																					561.5	564	566.5	11.2	22.4	
■ SML-Z14U4T																					557	560	563	140	280	
■ SML-Z14D4T		Yellow	189	70	200*1	12	-40 to +100	-40 to +100	2.0																	
■ SML-Z14Y4T																						625	630	635	280	560
■ SML-Z14M4T																						615	620	625	355	710
■ SML-Z14F4T																						602	605	608	112	224
■ SML-Z14P4T																						587	590	593	71	120
■ SMLZ14EGT(A)	569																					572	575	22.4	56	
■ SMLZ14BGT(A)	InGaN	White	114	30	100*2	5	-40 to +100	-40 to +100	3.3	20	100	5														
□ SMLZ14WBGAW(A)																					523	528	533	710	1,100	
□ SMLZ14WBGBW(A)																					465	470	475	140	280	
□ SMLZ14WBGCW(A)																					(x, y) (0.36, 0.36)	1,400	2,200			
□ SMLZ14WBGDW(A)	(x, y) (0.44, 0.40)	900	1,400																							
	(x, y) (0.30, 0.28)	1,400	2,200																							
	(x, y) (0.34, 0.34)	1,120	1,800																							

* 1:Duty1/10, 1kHz * 2:Duty1/5, 200Hz * 3:Reference

Dimensions

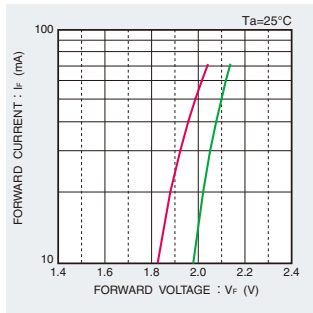


Recommended Solder Pattern Viewing Angle

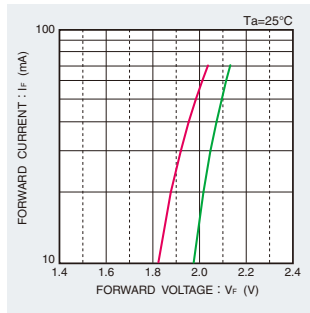


Electrical Characteristics Curves

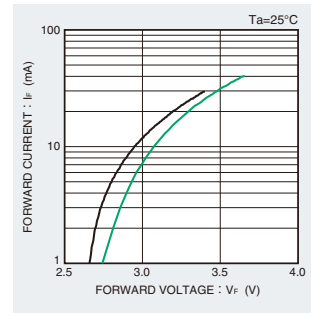
Forward Current-Forward Voltage



- SML-Z14VT(A)
- SML-Z14UT(A)
- SML-Z14DT(A)
- SML-Z14YT(A)
- SML-Z14MT(A)
- SML-Z14FT(A)
- SML-Z14PT(A)

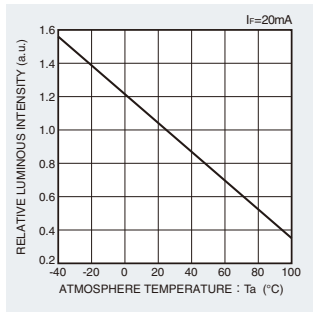


- SML-Z14V4T
- SML-Z14U4T
- SML-Z14D4T
- SML-Z14Y4T
- SML-Z14M4T
- SML-Z14F4T
- SML-Z14P4T

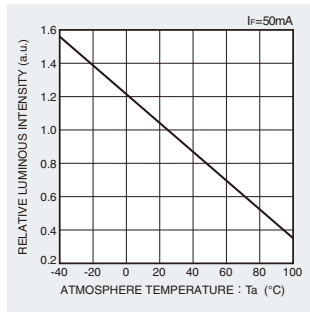


- SMLZ14EGT(A)
- SMLZ14BGT(A)
- SMLZ14WBGAW(A)
- SMLZ14WBGW(A)
- SMLZ14WBGW(A)
- SMLZ14WBGDW(A)

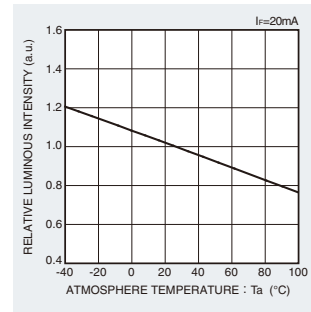
Luminous Intensity-Atmosphere Temperature



- SML-Z14VT(A)
- SML-Z14UT(A)
- SML-Z14DT(A)
- SML-Z14YT(A)
- SML-Z14MT(A)
- SML-Z14FT(A)
- SML-Z14PT(A)

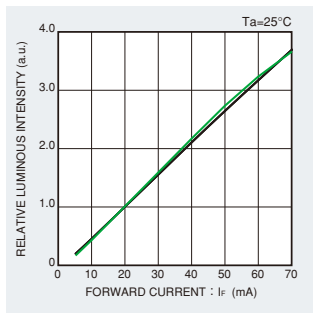


- SML-Z14V4T
- SML-Z14U4T
- SML-Z14D4T
- SML-Z14Y4T
- SML-Z14M4T
- SML-Z14F4T
- SML-Z14P4T

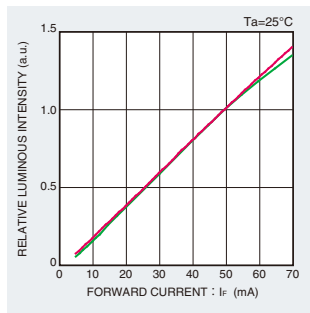


- SMLZ14EGT(A)
- SMLZ14BGT(A)
- SMLZ14WBGAW(A)
- SMLZ14WBGW(A)
- SMLZ14WBGW(A)
- SMLZ14WBGDW(A)

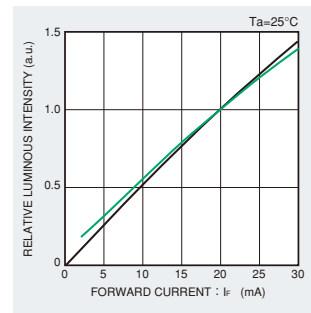
Luminous Intensity-Forward Current



- SML-Z14VT(A)
- SML-Z14UT(A)
- SML-Z14DT(A)
- SML-Z14YT(A)
- SML-Z14MT(A)
- SML-Z14FT(A)
- SML-Z14PT(A)

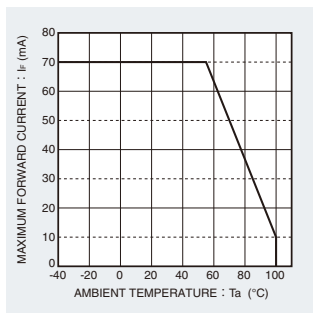


- SML-Z14V4T
- SML-Z14U4T
- SML-Z14D4T
- SML-Z14Y4T
- SML-Z14M4T
- SML-Z14F4T
- SML-Z14P4T

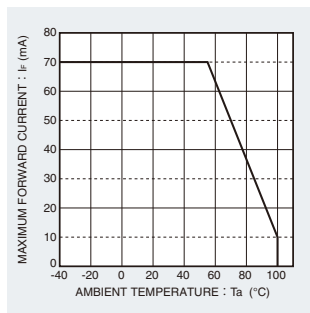


- SMLZ14EGT(A)
- SMLZ14BGT(A)
- SMLZ14WBGAW(A)
- SMLZ14WBGW(A)
- SMLZ14WBGW(A)
- SMLZ14WBGDW(A)

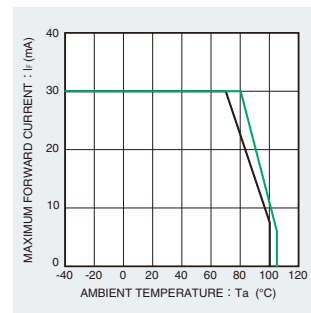
Derating



- SML-Z14VT(A)
- SML-Z14UT(A)
- SML-Z14DT(A)
- SML-Z14YT(A)
- SML-Z14MT(A)
- SML-Z14FT(A)
- SML-Z14PT(A)



- SML-Z14V4T
- SML-Z14U4T
- SML-Z14D4T
- SML-Z14Y4T
- SML-Z14M4T
- SML-Z14F4T
- SML-Z14P4T



- SMLZ14EGT(A)
- SMLZ14BGT(A)
- SMLZ14WBGAW(A)
- SMLZ14WBGW(A)
- SMLZ14WBGW(A)
- SMLZ14WBGDW(A)

SML-Z1 Series

Rank Reference of Brightness

Red (V, U)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	AM	AN	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE
				28 to 35.5	35.5 to 45	45 to 56	56 to 71	71 to 90	90 to 112	112 to 140	140 to 180	180 to 224	224 to 280	280 to 355	355 to 450	450 to 560	560 to 710	710 to 900	900 to 1120	1120 to 1400	1400 to 1800
PLCC2	3528	1.9	20	SML-Z14VT(A)								SML-Z14V4T									
			50	SML-Z14UT(A)								SML-Z14U4T									

Orange (D)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	AM	AN	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE
				28 to 35.5	35.5 to 45	45 to 56	56 to 71	71 to 90	90 to 112	112 to 140	140 to 180	180 to 224	224 to 280	280 to 355	355 to 450	450 to 560	560 to 710	710 to 900	900 to 1120	1120 to 1400	1400 to 1800
PLCC2	3528	1.9	20									SML-Z14DT(A)									
			50									SML-Z14D4T									

Yellow (Y)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	AM	AN	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE
				28 to 35.5	35.5 to 45	45 to 56	56 to 71	71 to 90	90 to 112	112 to 140	140 to 180	180 to 224	224 to 280	280 to 355	355 to 450	450 to 560	560 to 710	710 to 900	900 to 1120	1120 to 1400	1400 to 1800
PLCC2	3528	1.9	20									SML-Z14YT(A)									
			50									SML-Z14Y4T									

Green (M, P, F)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
				9 to 11.2	11.2 to 14	14 to 18	18 to 22.4	22.4 to 28	28 to 35.5	35.5 to 45	45 to 56	56 to 71	71 to 90	90 to 112	112 to 140	140 to 180	180 to 224	224 to 280	280 to 355	355 to 450	450 to 560
PLCC2	3528	1.9	20	SML-Z14PT(A)								SML-Z14MT(A)									
			50	SML-Z14FT(A)								SML-Z14M4T									
				SML-Z14P4T								SML-Z14F4T									

Bluish-Green (E)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	S1	S2	T1	T2	U1	U2	V1	V2	W1	W2	X1	X2	Y1	Y2	Z1	Z2
				90 to 110	110 to 140	140 to 180	180 to 220	220 to 280	280 to 360	360 to 450	450 to 560	560 to 710	710 to 900	900 to 1100	1100 to 1400	1400 to 1800	1800 to 2200	2200 to 2800	2800 to 3600
PLCC2	3528	1.9	20	SMLZ14EGT(A)															

Blue (B)

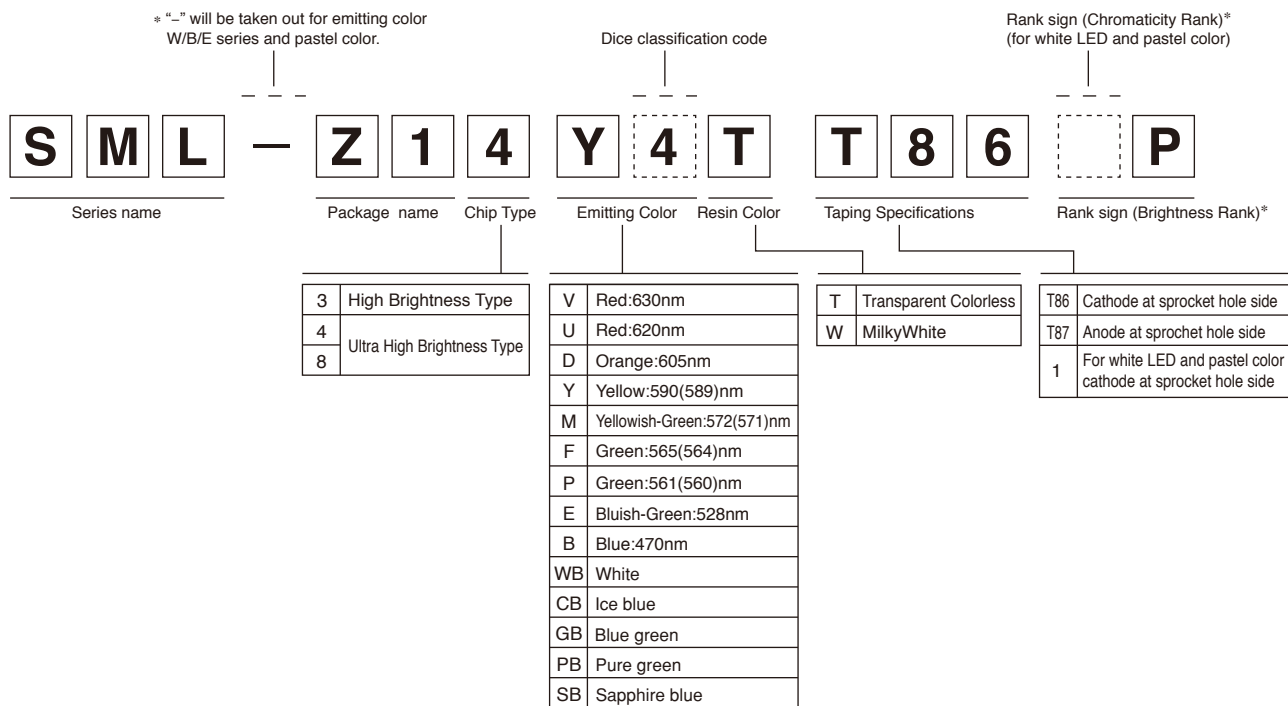
Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	S1	S2	T1	T2	U1	U2	V1	V2	W1	W2	X1	X2	Y1	Y2	Z1	Z2
				90 to 110	110 to 140	140 to 180	180 to 220	220 to 280	280 to 360	360 to 450	450 to 560	560 to 710	710 to 900	900 to 1100	1100 to 1400	1400 to 1800	1800 to 2200	2200 to 2800	2800 to 3600
PLCC2	3528	1.9	20	SMLZ14BGT(A)															

White (WB)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	S1	S2	T1	T2	U1	U2	V1	V2	W1	W2	X1	X2	Y1	Y2	Z1	Z2
				90 to 110	110 to 140	140 to 180	180 to 220	220 to 280	280 to 360	360 to 450	450 to 560	560 to 710	710 to 900	900 to 1100	1100 to 1400	1400 to 1800	1800 to 2200	2200 to 2800	2800 to 3600
PLCC2	3528	1.9	20	SMLZ14WBGAW(A)															
				SMLZ14WBGBW(A)															
				SMLZ14WBGCW(A)															
				SMLZ14WBGDW(A)															

* Please note that the brightness of some products may fall between ranks (half rank).

Part No. Construction



- * Concerning the rank sign.
 - Please refer to the rank chart above for luminous intensity classification.
 - Please refer to specification sheet for color 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.

Packing Specification

ROHM LED products are being shipped with desiccant (silica gel) concluded in moisture-proof bags.
 Pasting the moisture sensitive label on the outer surface of the moisture-proof bags or enclosing the humidity indication card inside the bag is available upon request.
 Please contact the nearest sales office or distributor if necessary.

Notes

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