



SML-51 Series

1608(0603)
 1.6×0.8mm(t=0.55mm)

Features

- Original device technology enables high brightness and high reliability
- High reliability due to the wide operation temperature(-40°C to +100°C) (SML-512(A) Series)

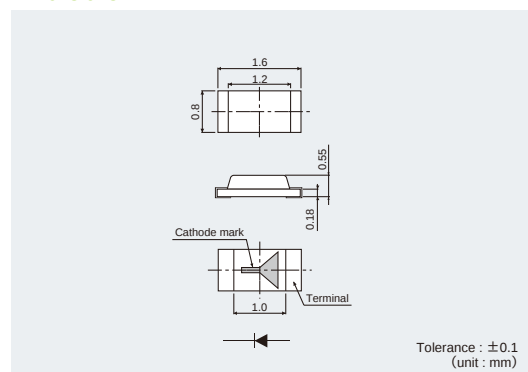
Color Type	V	U	C	D
	W	M	P	B

Specifications

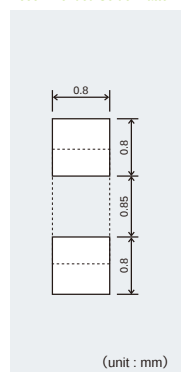
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25℃)						Electrical and Optical Characteristics (Ta=25℃)															
			Power Dissipation Pd(mW)	Forward Current If(mA)	Peak Forward Current Ifp(mA)	Reverse Voltage Vr(V)	Operating Temperature Topr(℃)	Storage Temperature Tstg(℃)	Forward Voltage Vf(Typ. (V)	Reverse Current Ir(If(mA)	Max. (μA)	Vr(V)	Dominant Wavelength λD Min.*3 (nm)	Typ. (nm)	Max.*3 (nm)	Ir(mA)	Luminous Intensity Iv (mcd)	Typ. (mcd)	Iv(mA)					
■ SML-512VW(A)		Red	75	30	100*2	5	-40 to +100	-40 to +100					626	630	636		35.5	56						
■ SML-512VW																	22	63						
■ SML-512UW																								
■ SML-511UW																	62	25		60*1	4	-30 to +85	-40 to +85	100
■ SML-512CW(A)	AlGaInP on GaAs	Orange	75	30	100*2	5	-40 to +100	-40 to +100	2.0	20			600	603	606		71	112						
■ SML-512DW																	603	606		609	20	36	100	20
■ SML-511DW																	62	25		60*1	4	-30 to +85	-40 to +85	100
■ SML-512WW		Yellow	75	30	100*2	5	-40 to +100	-40 to +100					587	590	593		36	63						
■ SML-511WW																	62			60*1	4	-30 to +85	-40 to +85	
■ SML-512MW		Yellowish Green	65	25			-30 to +85	-40 to +85					567	570	575		14							
■ SML-512PW(A)																	Green			100*2	5	-40 to +100	-40 to +100	2.1
■ SML512BC5T	InGaN	Blue	66	20			-40 to +100	-40 to +100	2.9	5			464	470	476	5	16	5						

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

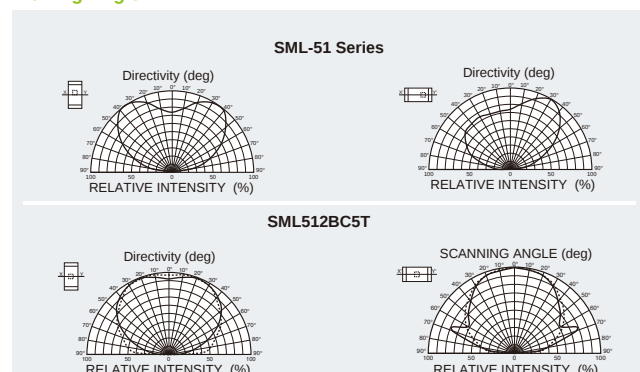
Dimensions



Recommended Solder Pattern

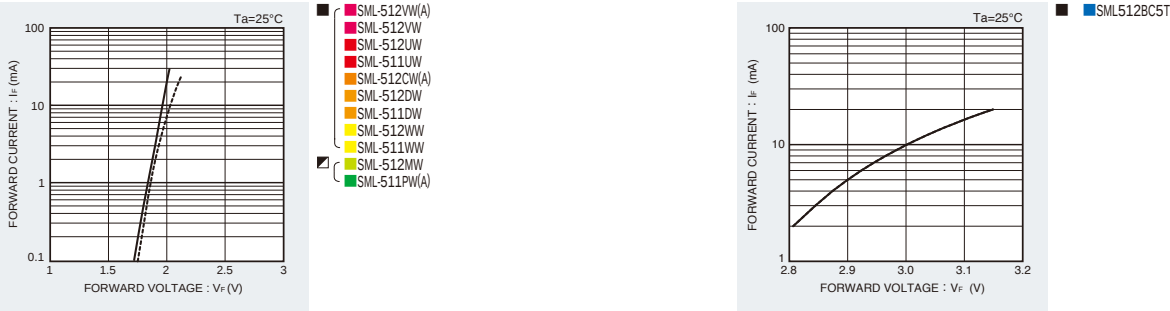


Viewing Angle

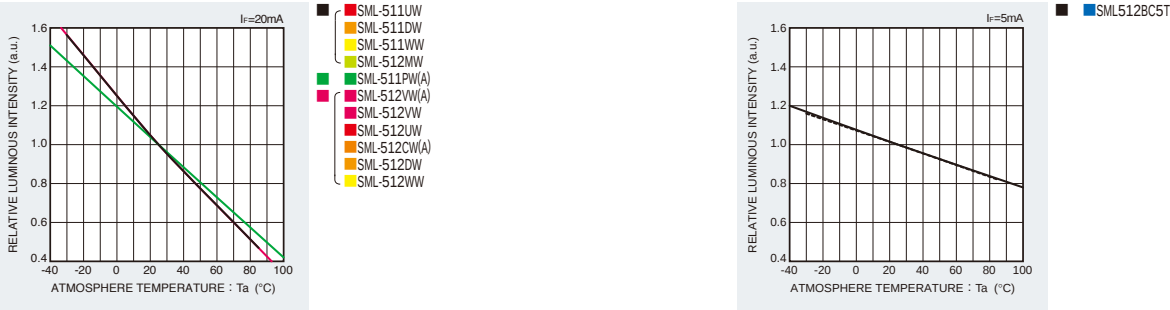


Electrical Characteristics Curves

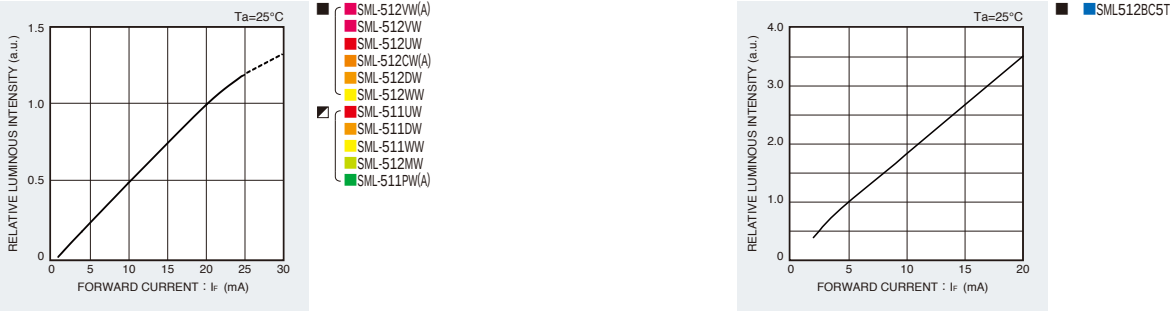
Forward Current-Forward Voltage



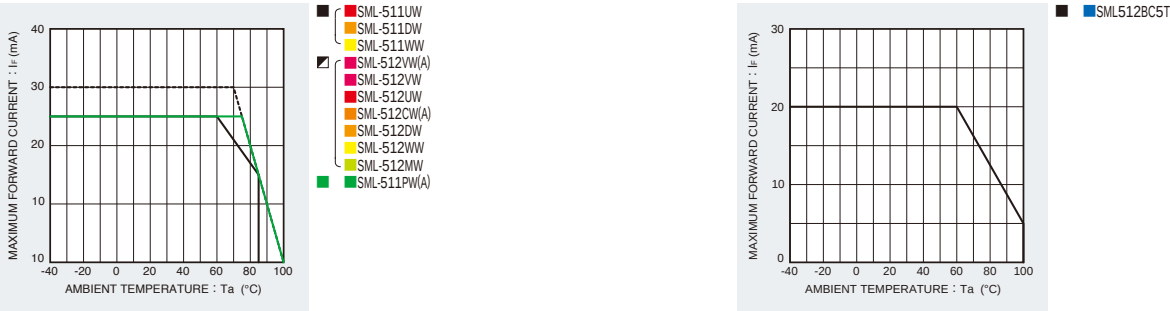
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



Rank Reference of Brightness

Red (V, U)

(Ta=25°C, If=20mA)

	Package size(mm)	Height(mm)	Luminous Intensity (mcd)	J	K	L	M	N	P	Q	R	S	T
				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
Mini-mold Chip LEDs	1608	0.55							SML-512VW*				
									SML-511UW*				
									SML-512UW*				

Orange (D)

(Ta=25°C, If=20mA)

	Package size(mm)	Height(mm)	Luminous Intensity (mcd)	J	K	L	M	N	P	Q	R	S	T
				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
Mini-mold Chip LEDs	1608	0.55							SML-511DW*				
									SML-512DW*				

Yellow (W)

(Ta=25°C, If=20mA)

	Package size(mm)	Height(mm)	Luminous Intensity (mcd)	J	K	L	M	N	P	Q	R	S	T
				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
Mini-mold Chip LEDs	1608	0.55							SML-511WW*				
									SML-512WW*				

Green (M)

(Ta=25°C, If=20mA)

	Package size(mm)	Height(mm)	Luminous Intensity (mcd)	J	K	L	M	N	P	Q	R	S	T
				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
Mini-mold Chip LEDs	1608	0.55						SML-512MW*					

Blue (B)

(Ta=25°C, If=5mA)

	Package size(mm)	Height(mm)	Luminous Intensity (mcd)	J	K	L	M	N	P	Q	R	S	T
				2.2 to 3.6	3.6 to 5.6	5.6 to 9.0	9 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220
Mini-mold Chip LEDs	1608	0.55				SML-512BC5T							

*Brightness on specification sheet include tolerance of within ±10%.

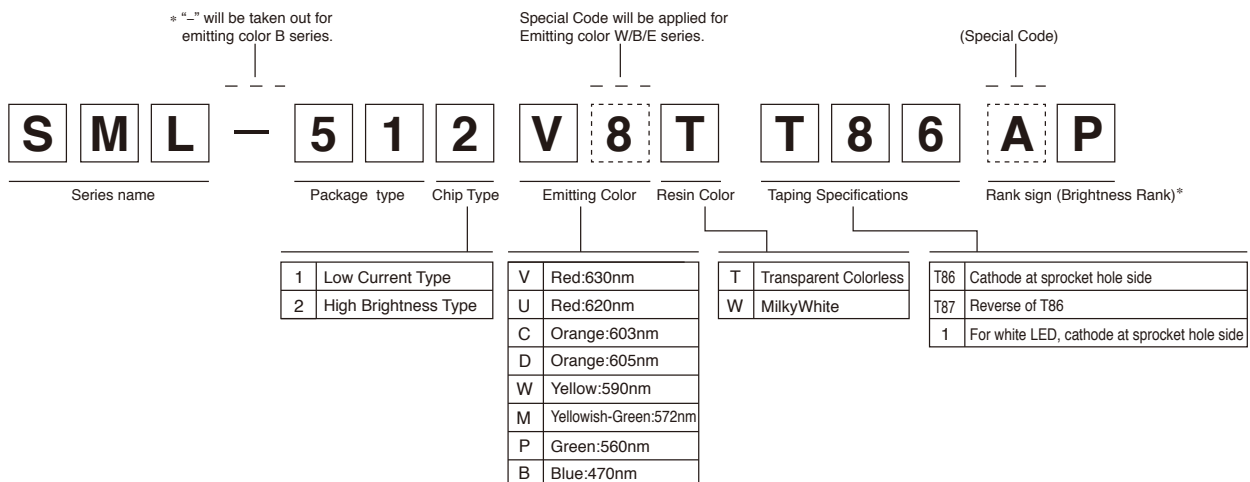
SML-512(A)

(Ta=25°C, If=20mA)

	Package size(mm)	Height(mm)	Luminous Intensity (mcd)	AE	AF	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU	AV
				5.6 to 7.1	7.1 to 9.0	9.0 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
Mini-mold Chip LEDs	1608	0.55										SML-512VW(A)					SML-512CW(A)		
				SML-512PW(A)															

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

Part No. Construction



* 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.

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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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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