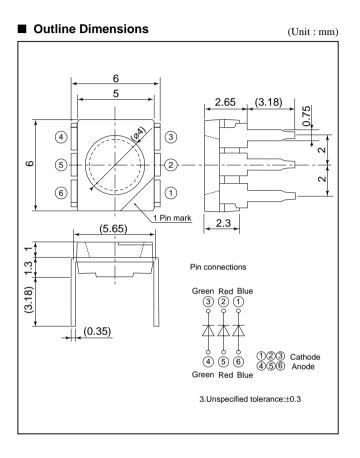
# GM5WA06250Z



#### ■ Absolute Maximum Ratings

	U	(1a=25 C)									
Model No.	Emitting color		P*1	Forward current IF	Peak forward current $IFM^{*2}$	Derating factor (mA/°C)		Reverse voltage VR	Operating temperature $T_{\mathrm{opr}}$	Tstg	$T_{sol}^{*3}$
			(mW)	(mA)	(mA)	DC	Pulse	(V)	(°C)	(°C)	(°C)
GM5WA06250Z	Blue	InGaN		50	80	0.83	1.33	5	-30 to +85	-40 to +85	295
	Green	InGaN	400	50	80	0.83	1.33	5	-30 to +85	-40 to +85	295
	Red	AlGaInP on GaAs		50	80	0.83	1.33	5	-30 to +85	-40 to +85	295

\*1 Within 400 mW at all chips are lightened.

\*2 Duty ratio=1/10, Pulse width=0.1ms

Notice

Internet

\*3 For 3s or less at the temperature of hand soldering. (At the position of 1.6mm or more from the bottom face of resin package)

catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

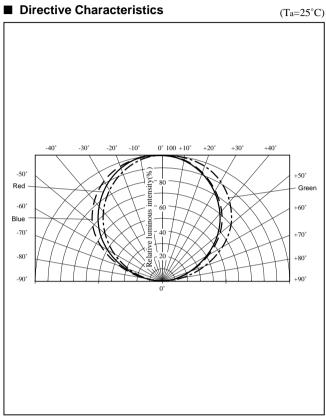
Internet address for Electronic Components Group http://sharp-world.com/ecg/

#### Electro-optical Characteristics

Lens type	Model No.	Radiation color	Forward voltage V <sub>F</sub> (V)			Dominant wavelengt		Luminous intensity		Reverse current		Page for characteristics
					IF 7	λd (nm)	IF	Iv (mcd)	IF	Ir(µA)	Vr	
			TYP	MAX	(mA)	TYP	(mA)	TYP	(mA)	MAX	(V)	diagrams
Colorless transparency	GM5WA06250Z	Blue	4.2	5.0	40	469	40		20	100	4	
		Green	4.2	5.0	40	520	40	1 450	40	100	4	65 to 66
		Red	2.3	2.5	40	628	40		40	100	4	

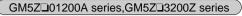
In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in

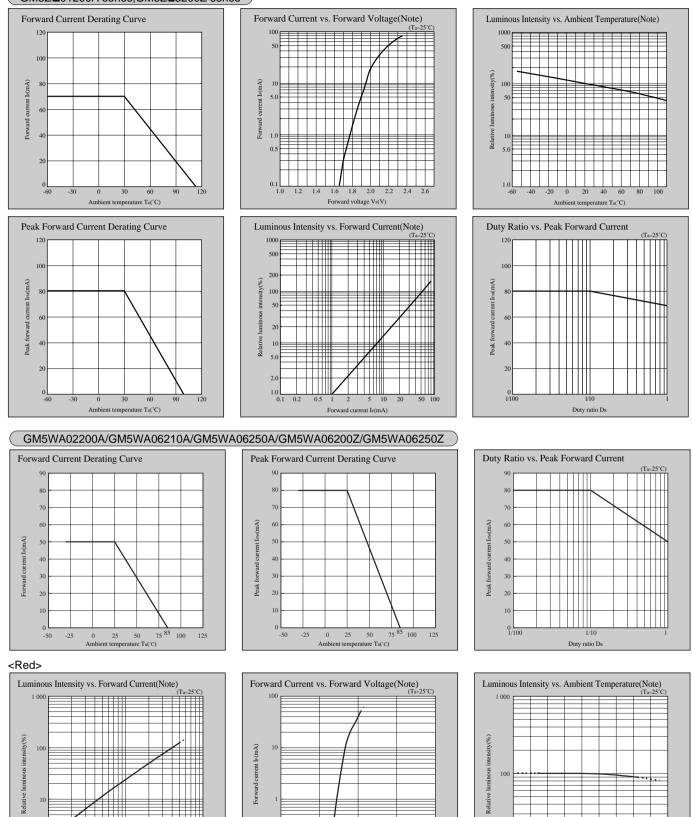
### 6.0×5.0mm, 2.3mm Thickness, (Resin portion), RGB 3-Color Emission Super-luminosity Chip LED



 $(T_{\circ}-25^{\circ}C)$ 

 $(T_a=25^{\circ}C)$ 





Characteristics Diagrams

Notice In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device. Internet address for Electronic Components Group http://sharp-world.com/ecg/ Internet

2.00

Forward voltage VF(V)

3.00

-20

40

20 40 60 80 100 120

Ambient temperature Ta(°C)

0.1 ∟ 1.00

Note)Characteristics shown in diagrams are typical values. (not assurance value)

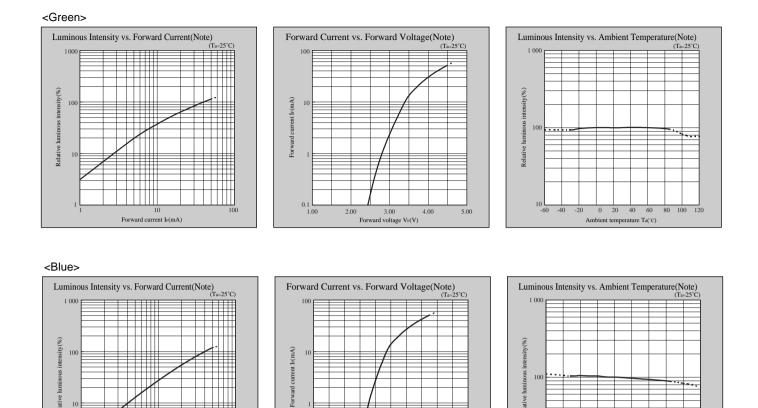
10

Forward current IF(mA)

65

## **Characteristics Diagrams**

Forward current IF(mA)



0.1

Note)Characteristics shown in diagrams are typical values. (not assurance value)

2.00

Forward voltage V<sub>F</sub>(V)

Selativ

6.00

5.00

10 L

40

Ambient temperature Ta(°C)

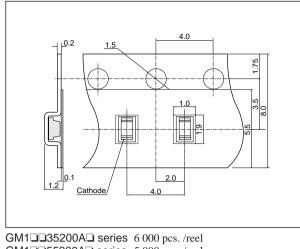
60 80 100 120

66

Relativ 10

## **Taping Specifications**

(Unit:mm)

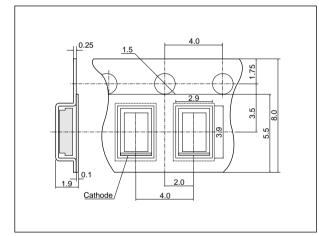


 GM1135200A1 series
 6 000 pcs. /reel

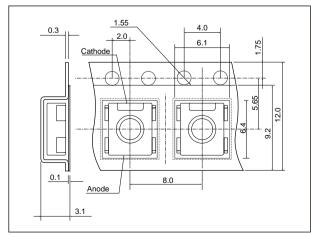
 GM11355200A1 series
 5 000 pcs. /reel

 LT11367A series
 4 000 pcs. /reel

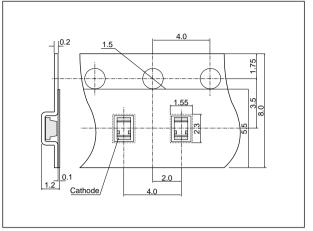
 LT11397A series
 5 000 pcs. /reel



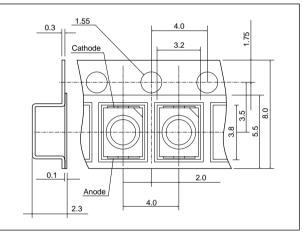
LT1 90A series 3 000 pcs. / reel



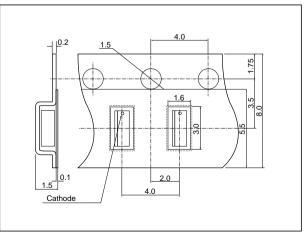
GM5DD1200A series/GM5WA02200A/GM5WA06210A/ GM5WA06250A 800 pcs. / reel



GM10040300AE series/LT10040A series 4 000 pcs. /reel



GM5DD95200AD series/LT1ZD95A series 2 000 pcs. /reel



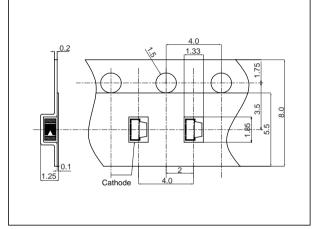
LT1DD45A series/GM4DC13300AC series 3 000 pcs. /reel

Notice In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device. Internet address for Electronic Components Group http://sharp-world.com/ecg/

# **Taping Specifications**

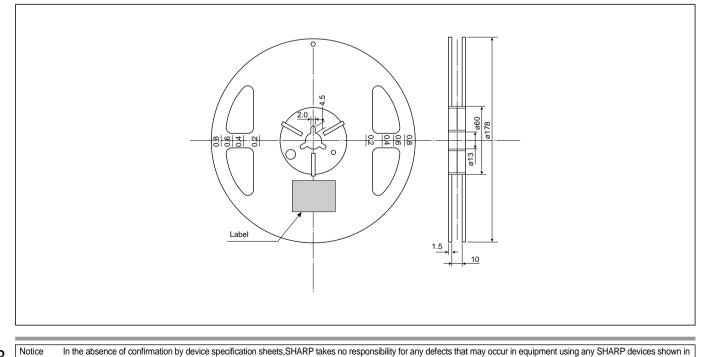
1.5

LT1 DG7A series/GM1WA80350A/GM1ZUB 80300A/GM1ZSG80300A  $4\,000\ pcs.$  /reel



GM4DB1200AD series 4 000 pcs. /reel

#### ■ Shape and dimension of reel



 $\begin{array}{c} 1.5 \\$ 

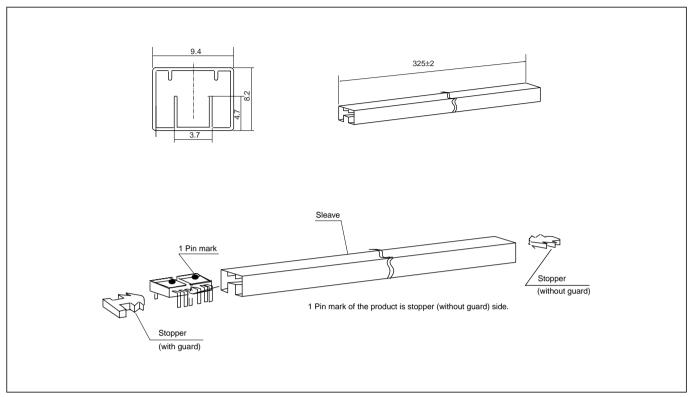


 Notice
 In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

 Internet
 Internet address for Electronic Components Group http://sharp-world.com/ecg/

# **Taping Specifications**

Lead type Chip LED (Unit : mm)



GM5DD03200Z series/GM5WA06200Z/GM5WA06250Z 1 000 pcs. (50 pcs./sleeve×20)

 Notice
 In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

 Internet
 Internet address for Electronic Components Group http://sharp-world.com/ecg/

#### NOTICE

- The circuit application examples in this publication are provided to explain representative applications of SHARP devices and are not intended to guarantee any circuit design or license any intellectual property rights. SHARP takes no responsibility for any problems related to any intellectual property right of a third party resulting from the use of SHARP's devices.
- Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device. SHARP reserves the right to make changes in the specifications, characteristics, data, materials, structure, and other contents described herein at any time without notice in order to improve design or reliability. Manufacturing locations are also subject to change without notice.
- Observe the following points when using any devices in this publication. SHARP takes no responsibility for damage caused by improper use of the devices which does not meet the conditions and absolute maximum ratings to be used specified in the relevant specification sheet nor meet the following conditions:
- (i) The devices in this publication are designed for use in general electronic equipment designs such as:
- Personal computers
- Office automation equipment
- Telecommunication equipment [terminal]
- Test and measurement equipment
- Industrial control
- Audio visual equipment
- Consumer electronics

(ii) Measures such as fail-safe function and redundant design should be taken to ensure reliability and safety when SHARP devices are used for or in connection with equipment that requires higher reliability such as:

- Transportation control and safety equipment (i.e., aircraft, trains, automobiles, etc.)
- Traffic signals
- Gas leakage sensor breakers
- Alarm equipment
- Various safety devices, etc.

(iii)SHARP devices shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as:

- Space applications
- Telecommunication equipment [trunk lines]
- Nuclear power control equipment
- Medical and other life support equipment (e.g., scuba).
- If the SHARP devices listed in this publication fall within the scope of strategic products described in the Foreign Exchange and Foreign Trade Law of Japan, it is necessary to obtain approval to export such SHARP devices.
- This publication is the proprietary product of SHARP and is copyrighted, with all rights reserved. Under the copyright laws, no part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, in whole or in part, without the express written permission of SHARP. Express written permission is also required before any use of this publication may be made by a third party.
- Contact and consult with a SHARP representative if there are any questions about the contents of this publication.