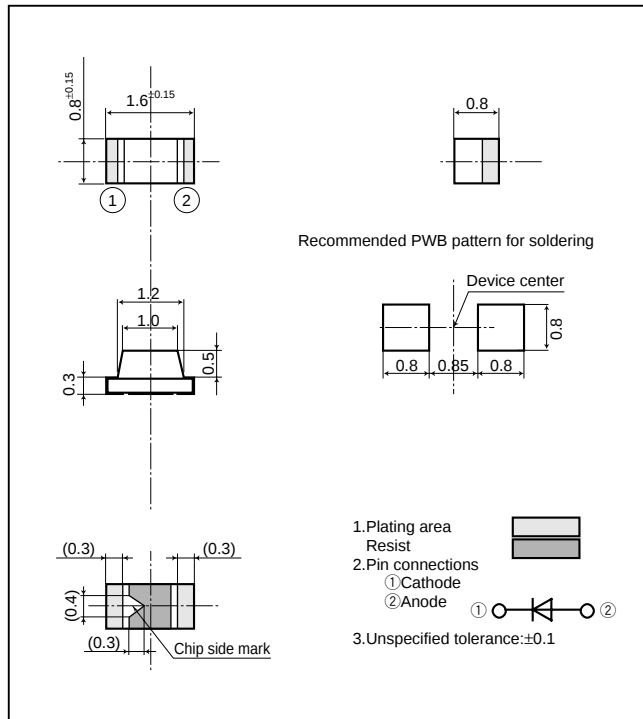


LT1□67A series

1608 Size, 0.8mm Thickness,
Leadless Chip LED

■ Outline Dimensions

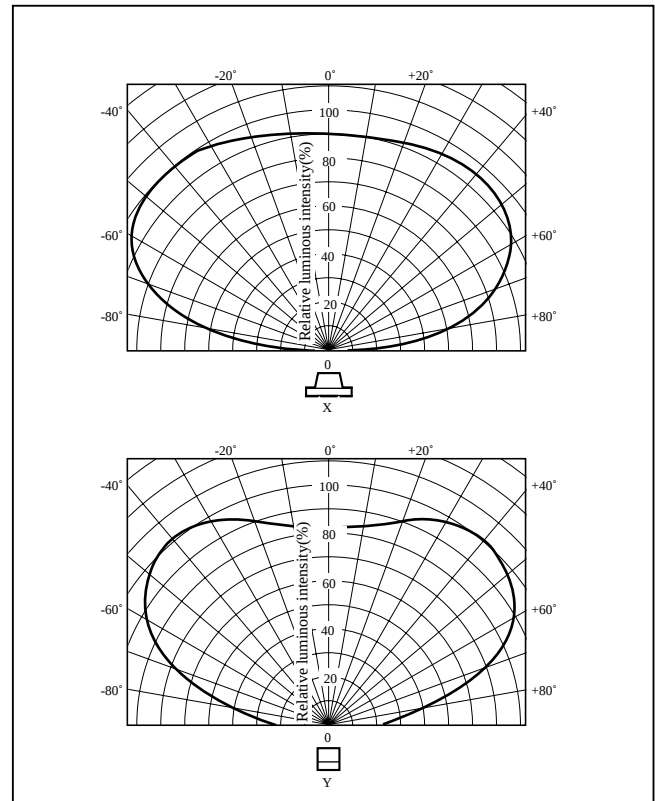
(Unit : mm)



LT1U67A: There is Anode mark on the device because polarity faces in the opposite direction.

■ Directive Characteristics

(Ta=25°C)



■ Absolute Maximum Ratings

(Ta=25°C)

Model No.	Emitting color	Material	Power dissipation P (mW)	Forward current IF (mA)	Peak forward current IFM*1 (mA)	Derating factor (mA/°C)		Reverse voltage VR (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)	Soldering temperature Tsol*2 (°C)
						DC	Pulse				
LT1U67A	Red(Super-luminosity)	GaAlAs on GaAlAs	75	30	50	0.40	0.67	4	-30 to +85	-40 to +100	350
LT1P67A	Red	GaP	23	10	50	0.13	0.67	5	-30 to +85	-40 to +100	350
LT1D67A	Red	GaAsP on GaP	84	30	50	0.40	0.67	5	-30 to +85	-40 to +100	350
LT1S67A	Sunset orange	GaAsP on GaP	84	30	50	0.40	0.67	5	-30 to +85	-40 to +100	350
LT1H67A	Yellow	GaAsP on GaP	84	30	50	0.40	0.67	5	-30 to +85	-40 to +100	350
LT1E67A	Yellow-green	GaP	84	30	50	0.40	0.67	5	-30 to +85	-40 to +100	350
LT1K67A	Green	GaP	84	30	50	0.40	0.67	5	-30 to +85	-40 to +100	350
LT1F67A	Yellow-green(High-luminosity)	GaP	84	30	50	0.40	0.67	5	-30 to +85	-40 to +100	350
LT1F67AF	Yellow-green	GaP	84	30	50	0.40	0.67	5	-30 to +85	-40 to +100	350

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

*2 For 3s or less at the temperature of hand soldering. Temperature of reflow soldering is shown on page 2.

■ Electro-optical Characteristics

(Ta=25°C)

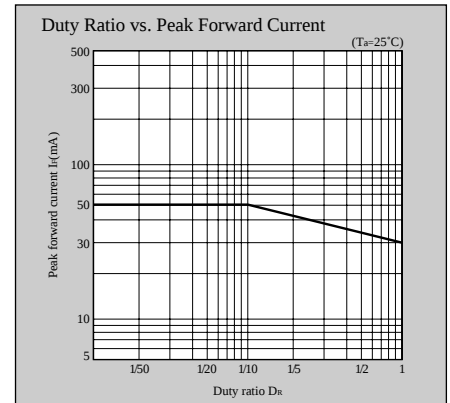
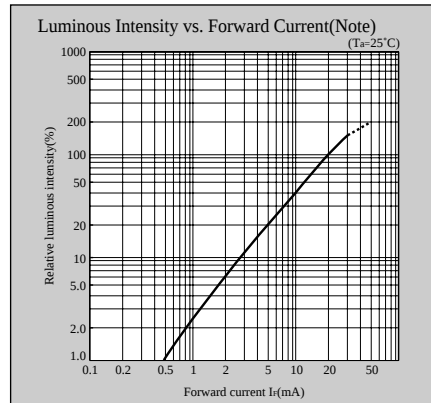
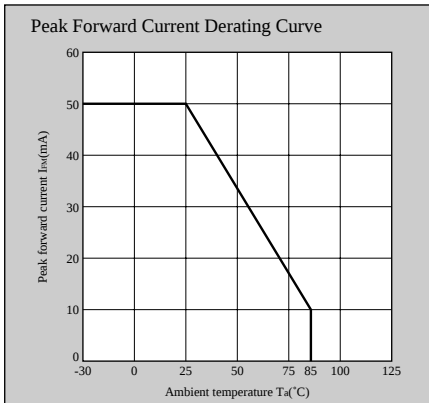
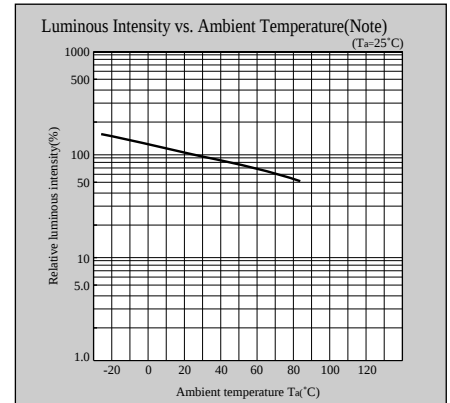
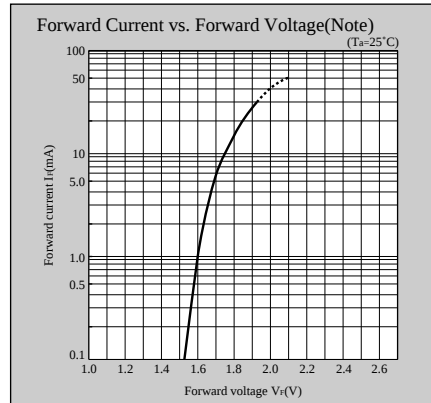
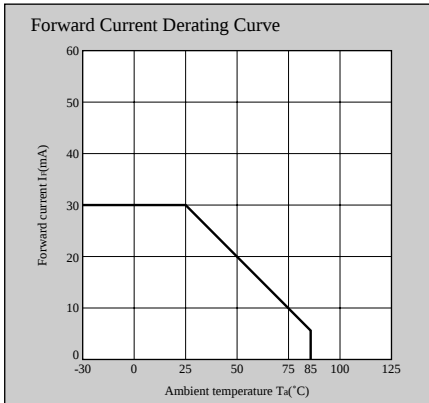
Lens type	Model No.	Forward voltage VF(V)		Peak emission wavelength λp(nm)		Luminous intensity Iv(mcd)		Spectrum radiation bandwidth Δλ(nm)		Reverse current IR(μA)		Terminal capacitance Ct(pF)		Page for characteristics diagrams
		TYP	MAX	TYP	IF (mA)	TYP	IF (mA)	TYP	IF (mA)	MAX	VR (V)	TYP	(MHz)	
Milky diffusion	LT1U67A	1.85	2.5	660	20	29.7	20	20	20	100	4	25	1	56
	LT1P67A	1.9	2.3	695	5	1.3	5	100	5	10	4	55	1	57
	LT1D67A	2.0	2.8	635	20	8.8	20	35	20	10	4	20	1	57
	LT1S67A	2.0	2.8	610	20	6.9	20	35	20	10	4	15	1	58
	LT1H67A	2.0	2.8	585	20	8.3	20	30	20	10	4	35	1	58
	LT1E67A	2.1	2.8	565	20	11.0	20	30	20	10	4	35	1	59
	LT1K67A	2.1	2.8	555	20	3.8	20	25	20	10	4	40	1	59
	LT1F67A	2.1	2.8	570	20	19.0	20	30	20	10	4	35	1	59
	LT1F67AF	2.1	2.8	570	20	23.0	20	30	20	10	4	35	1	59

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.

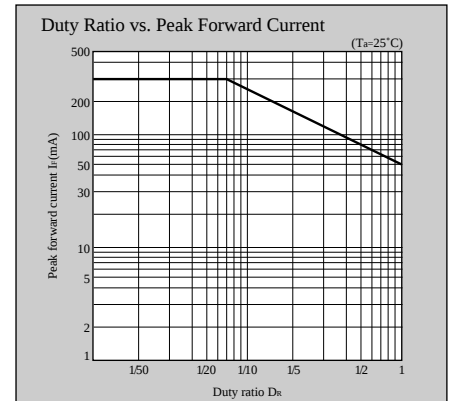
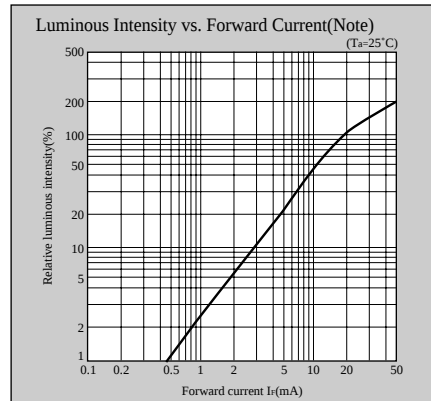
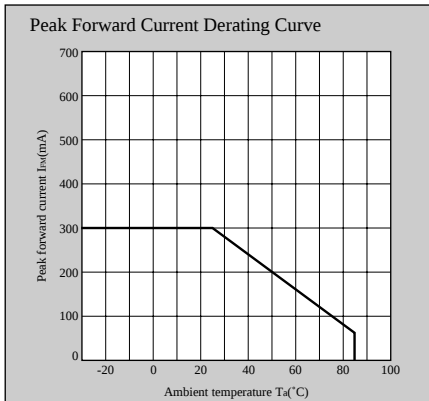
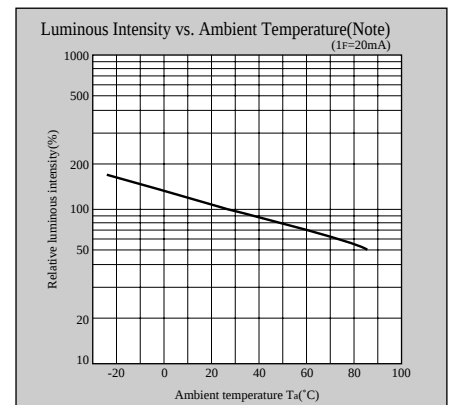
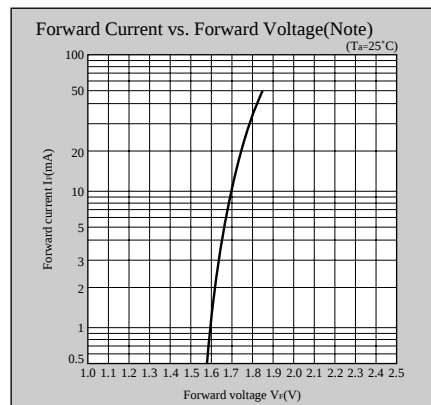
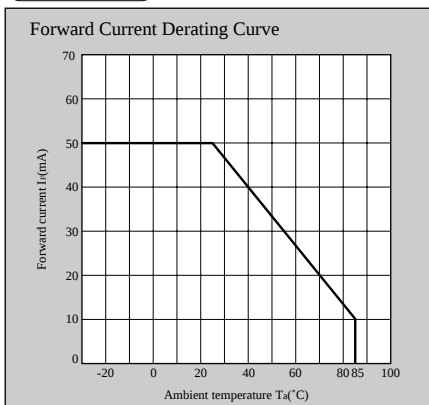
Internet Internet address for Electronic Components Group <http://sharp-world.com/ecg/>

Characteristics Diagrams

UR,U series



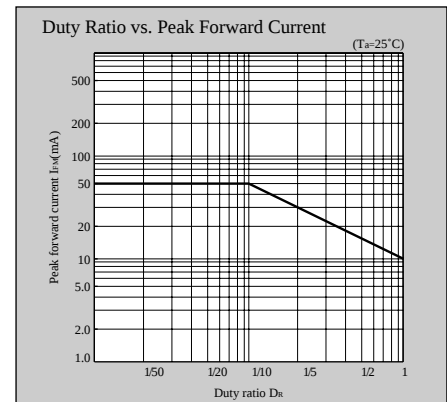
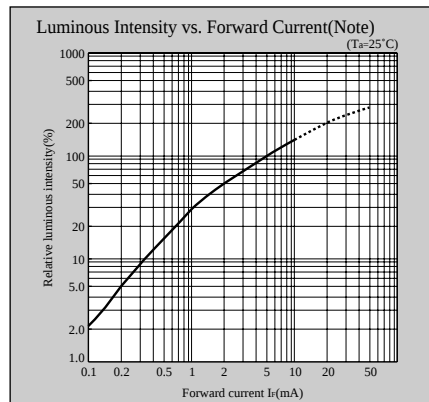
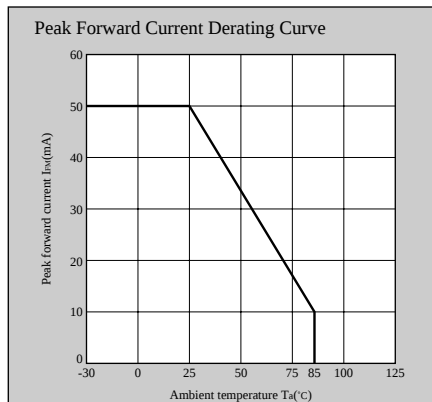
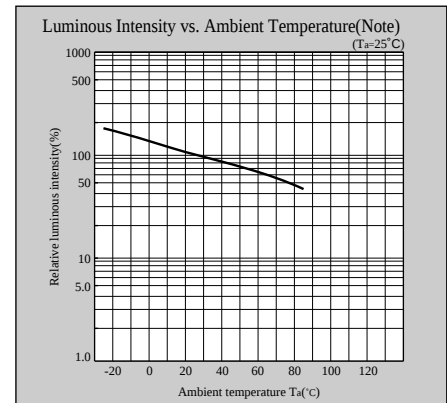
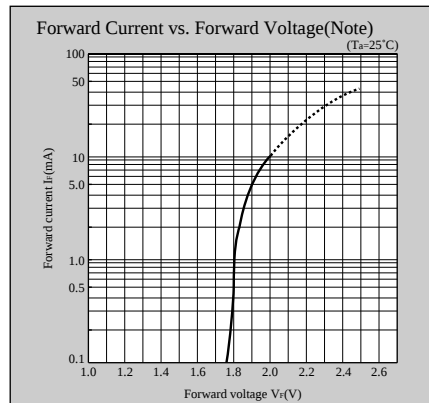
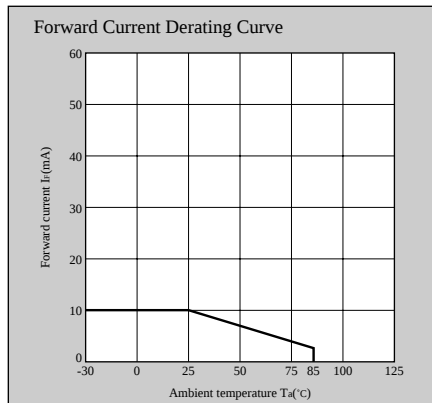
TR,T series



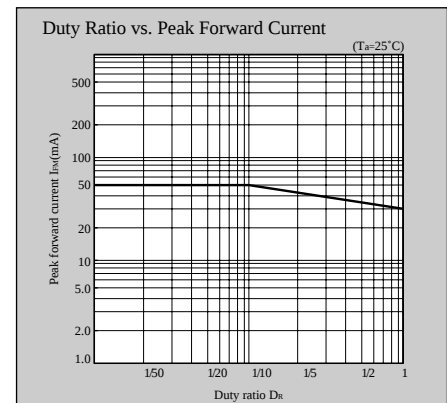
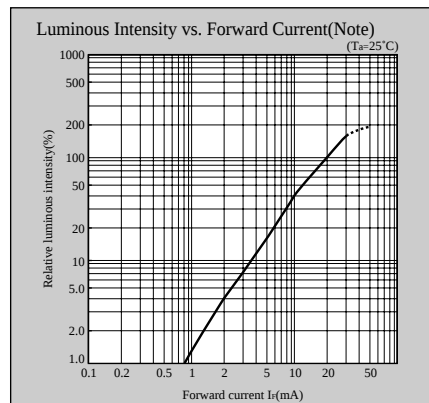
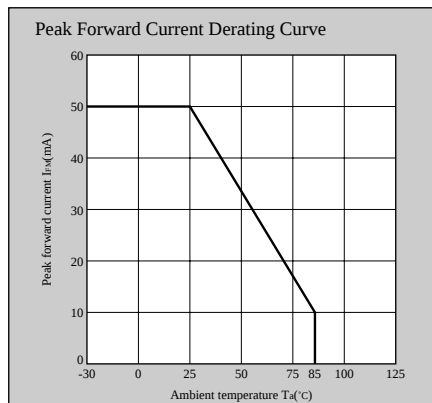
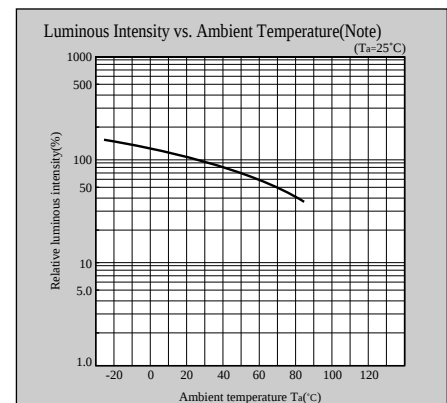
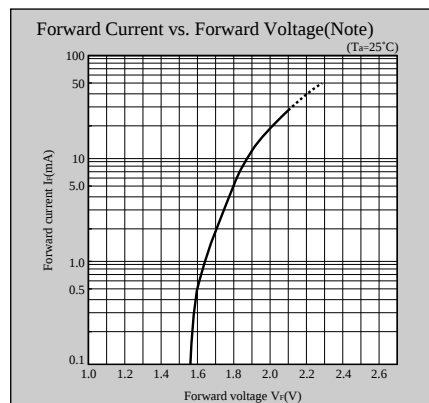
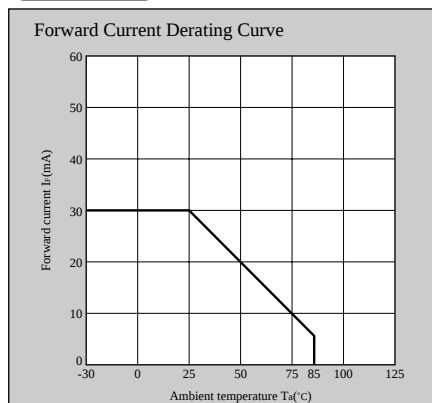
Note) Characteristics shown in diagrams are typical values. (not assurance value)

Characteristics Diagrams

PR,P series



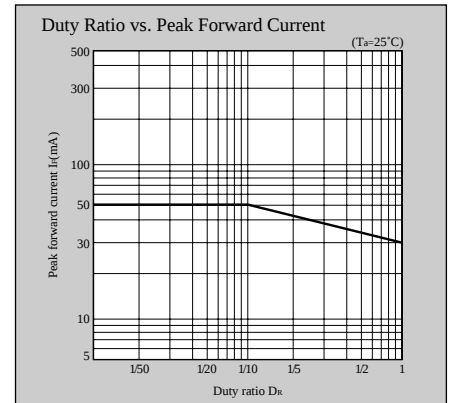
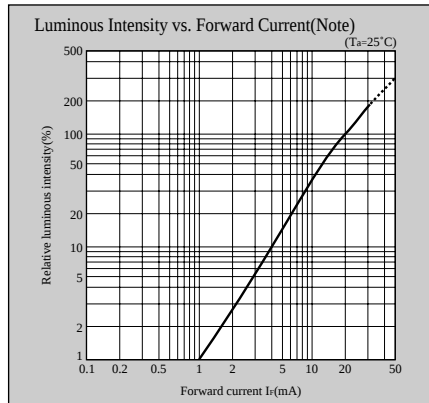
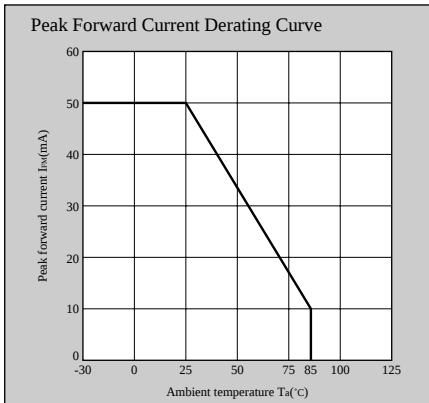
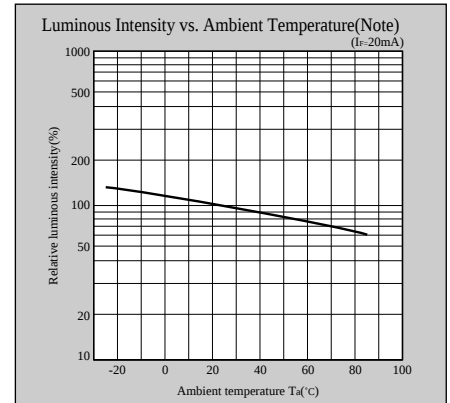
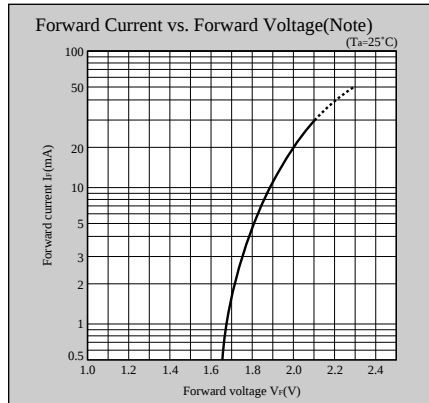
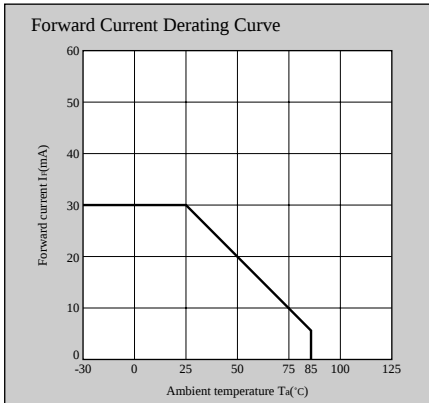
HD,D series



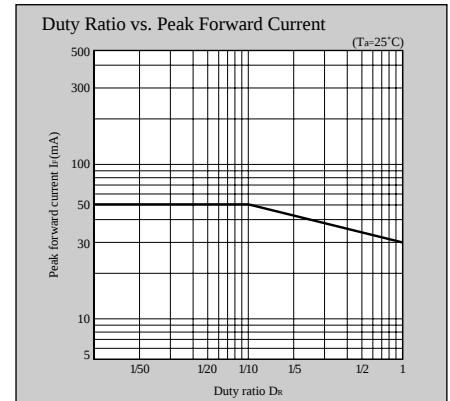
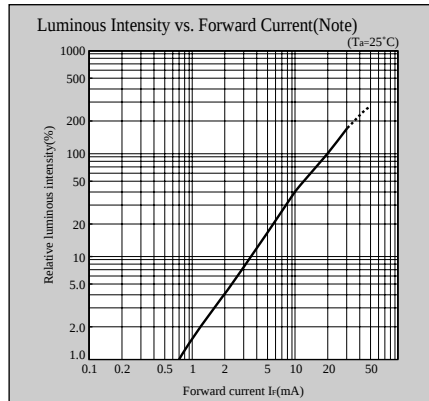
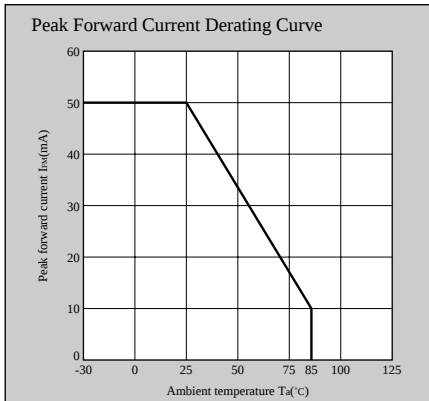
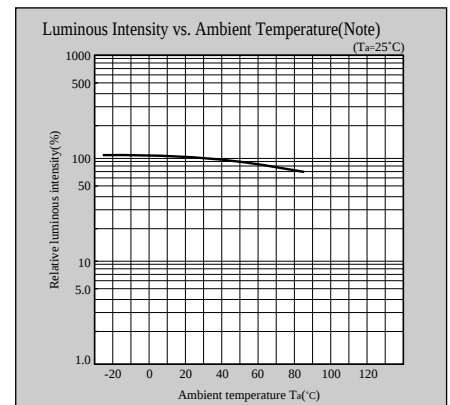
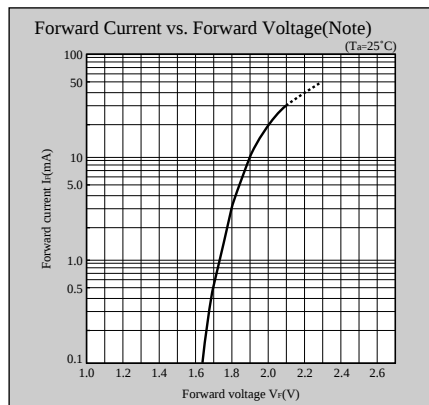
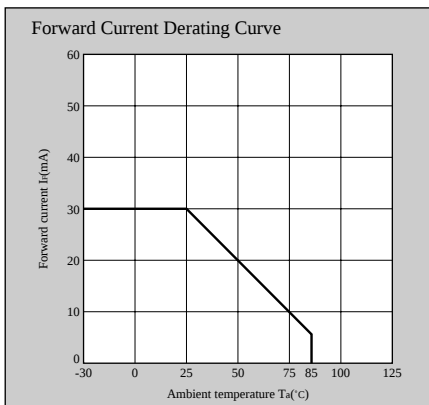
Note) Characteristics shown in diagrams are typical values. (not assurance value)

Characteristics Diagrams

HS,S series



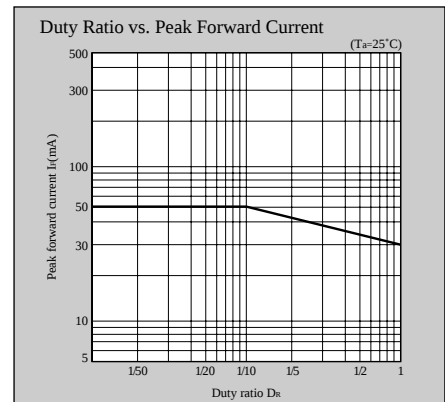
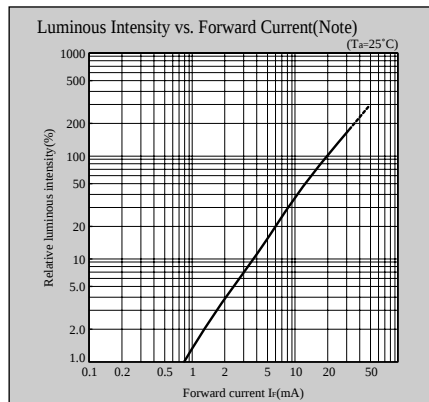
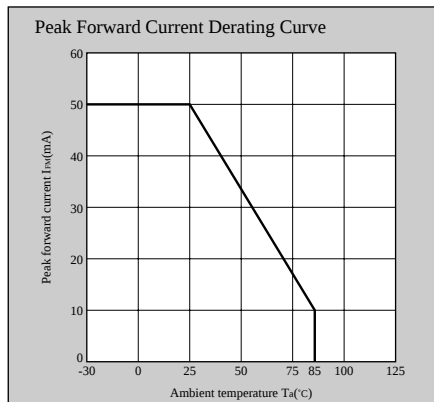
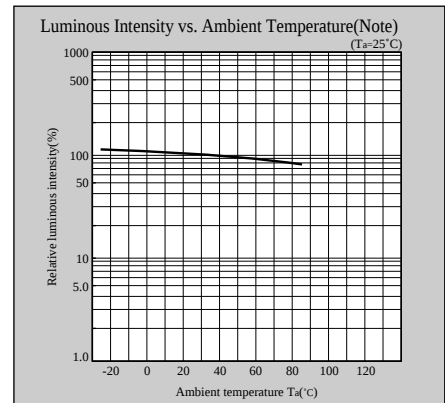
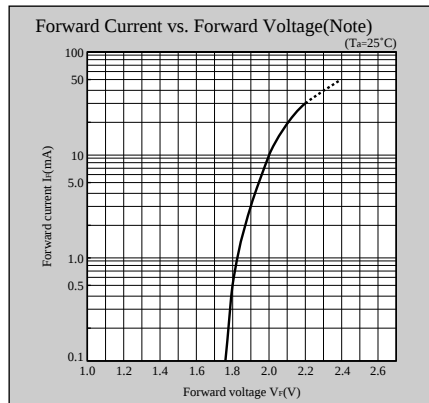
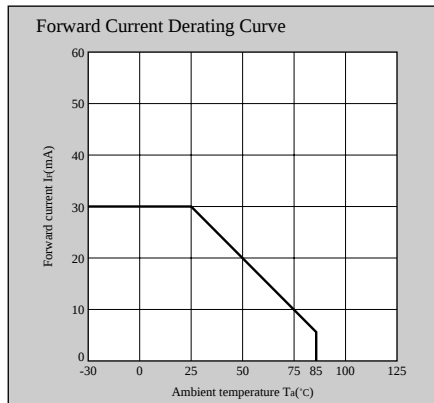
HY,H series



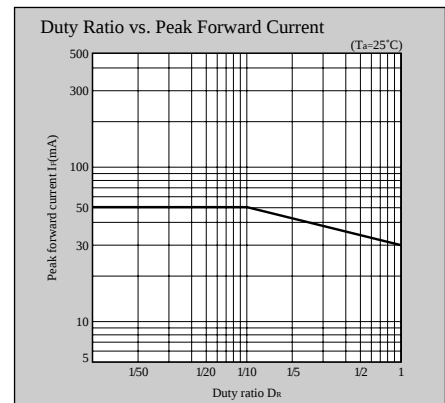
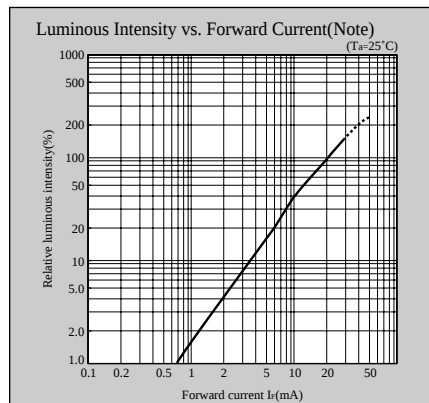
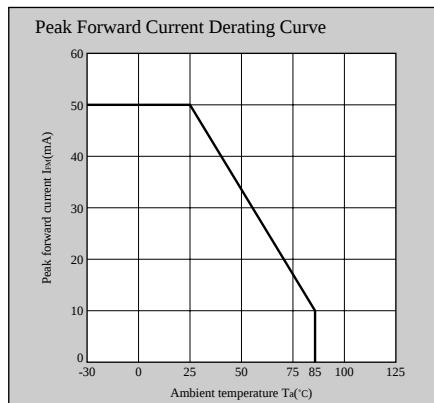
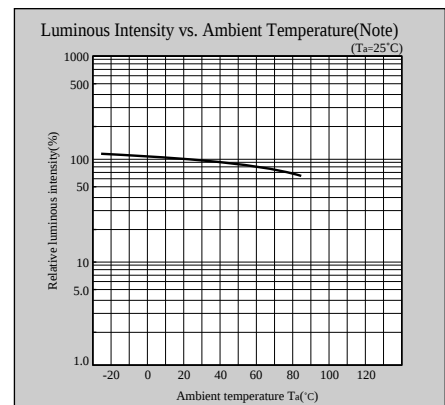
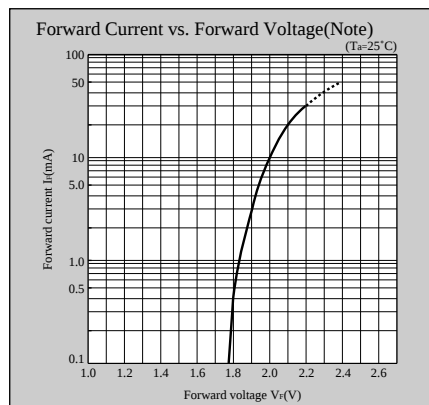
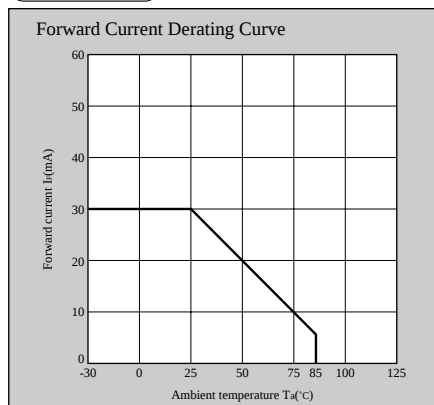
Note) Characteristics shown in diagrams are typical values. (not assurance value)

Characteristics Diagrams

EG,E,F series



KG,K series



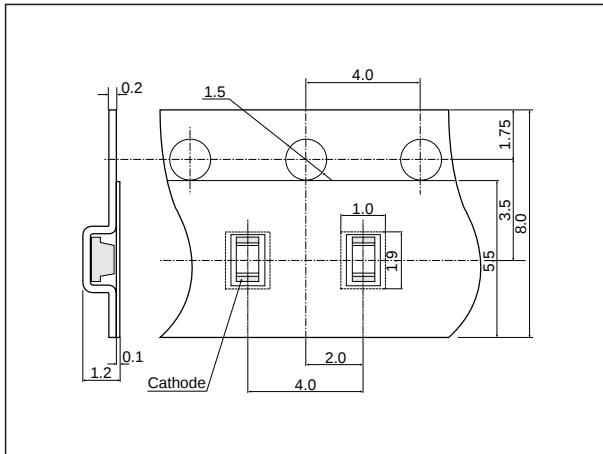
Note) Characteristics shown in diagrams are typical values. (not assurance value)

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.

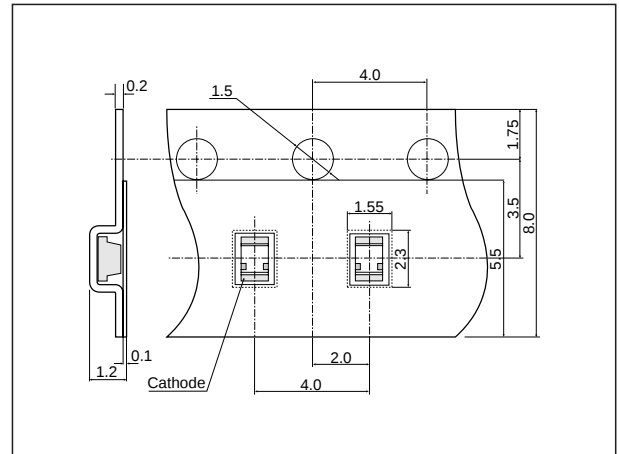
Internet Internet address for Electronic Components Group <http://sharp-world.com/ecg/>

Taping Specifications

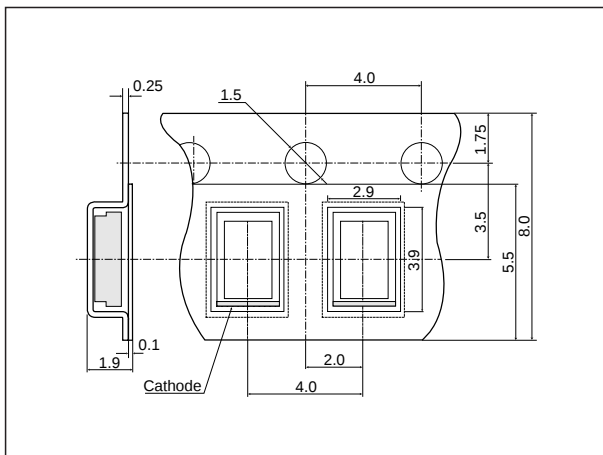
(Unit : mm)



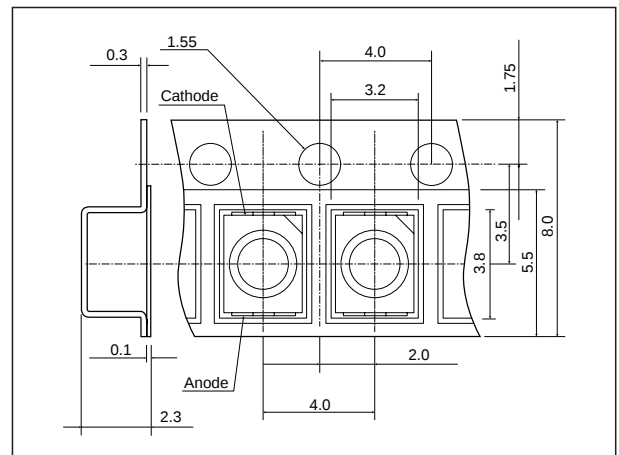
GM1□□35200A□ series 6 000 pcs. /reel
GM1□□55200A□ series 5 000 pcs. /reel
LT1□□67A series 4 000 pcs. /reel
LT1□□97A series 5 000 pcs. /reel



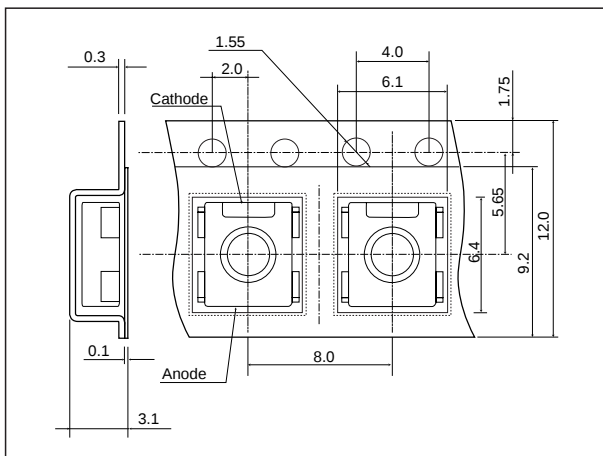
GM1□□40300AE series/LT1□□40A series 4 000 pcs. /reel



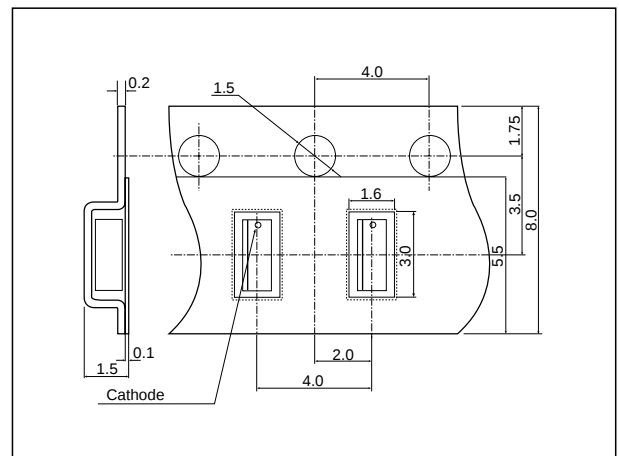
LT1□90A series 3 000 pcs. / reel



GM5□□95200A□ series/LT1Z□95A series 2 000 pcs. /reel

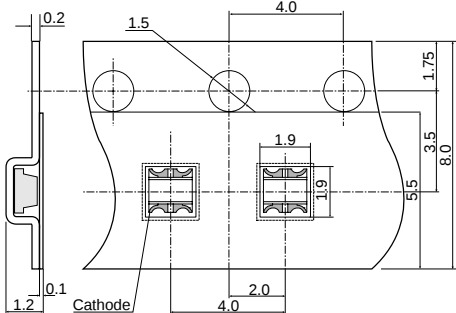


GM5□□01200A series/GM5WA02200A/GM5WA06210A/
GM5WA06250A 800 pcs. / reel

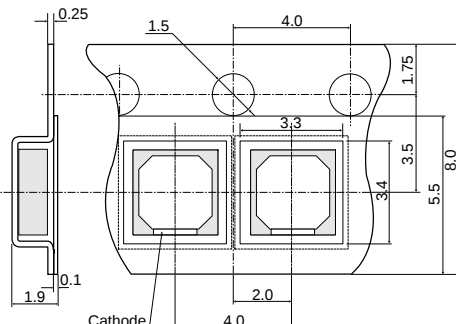


LT1□□45A series/GM4□C13300AC series 3 000 pcs. /reel

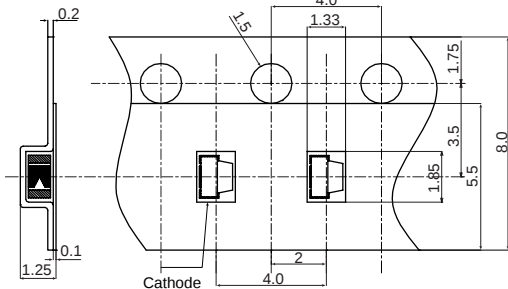
(Unit : mm)



LT1□□67A series/GM1WA80350A/GM1ZUB 80300A/GM1ZSG80300A
4 000 pcs. /reel

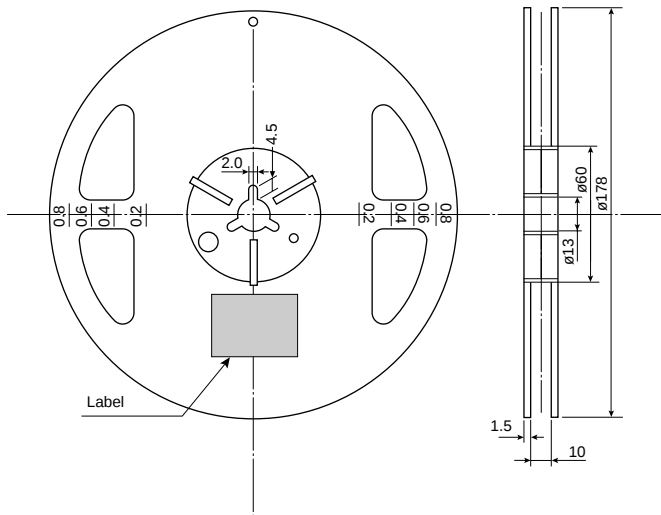


LT1□□90A series 3 000 pcs. / reel



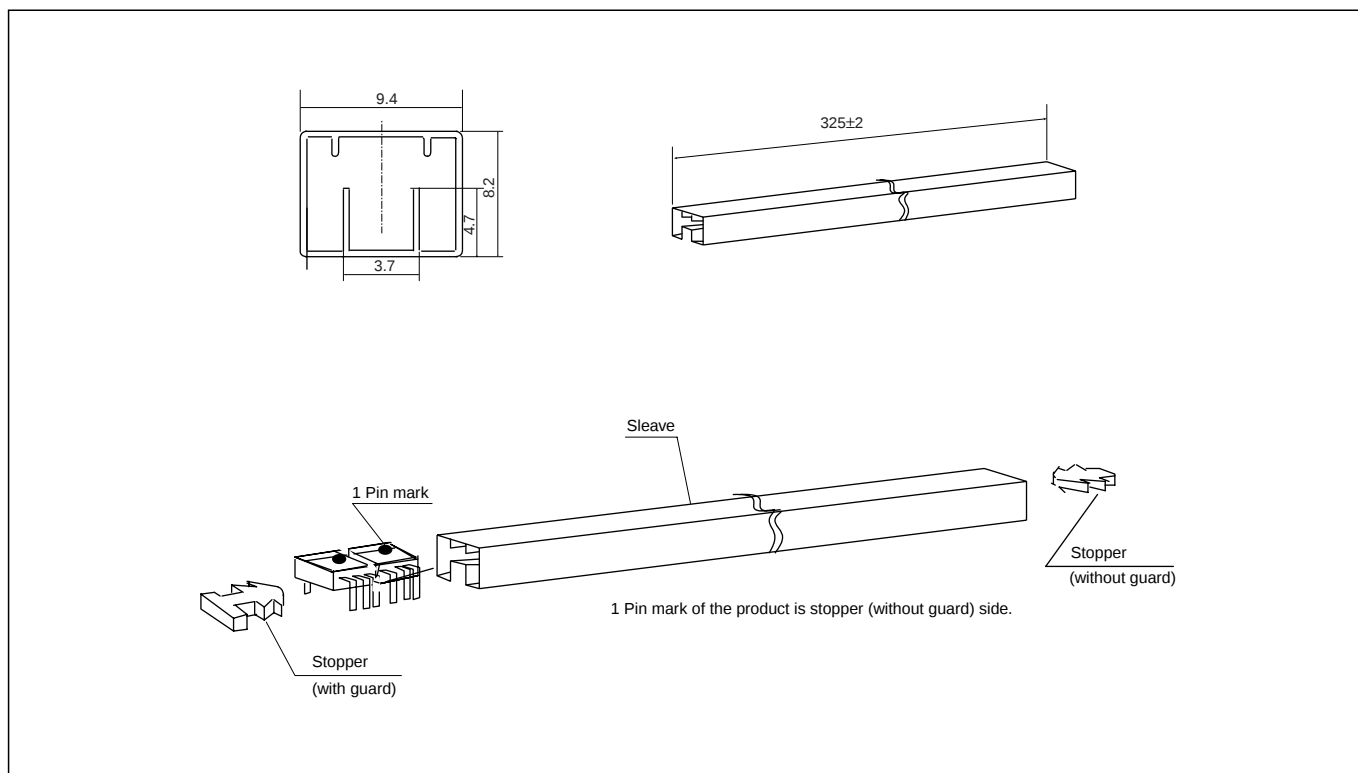
GM4□□81200A□ series 4 000 pcs. /reel

■ Shape and dimension of reel



Taping Specifications

■Lead type Chip LED (Unit : mm)



GM5□□03200Z series/GM5WA06200Z/GM5WA06250Z 1 000 pcs. (50 pcs./sleeve x 20)

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.