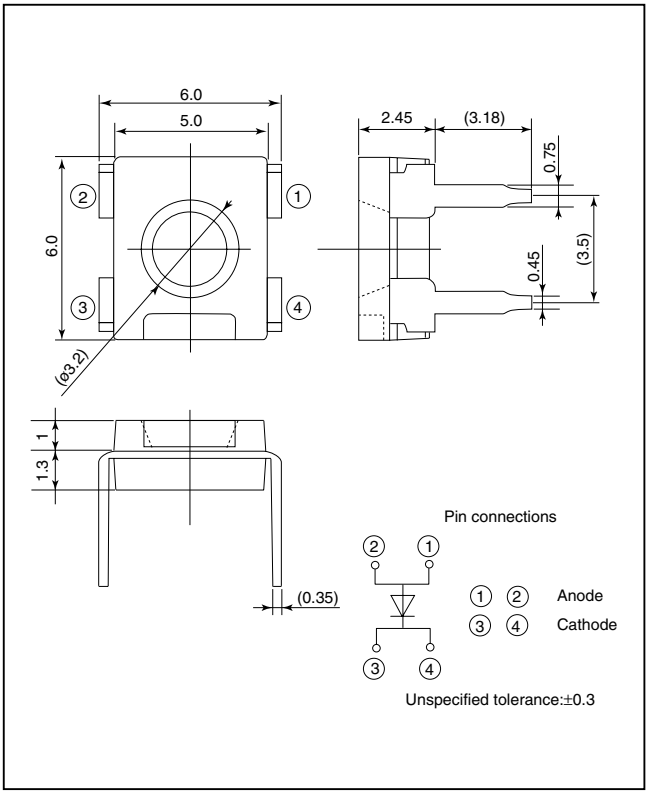
GM5Z❑03200Z series

6050 Size, 2.3mm Thickness (Resin portion), Chip LED

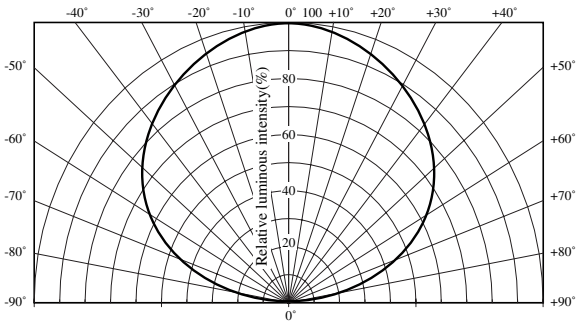
■ Outline Dimensions

(Unit : mm)



■ Directive Characteristics

(Ta=25˚C)



■ Absolute Maximum Ratings

(Ta=25˚C)

Model No.	Emitting color	Material	Power dissipation P (mW)	Forward current I_F (mA)	Peak forward current I_{FM}*1 (mA)	Derating factor (mA/˚C)		Reverse voltage V_R (V)	Operating temperature T_{opr} (˚C)	Storage temperature T_{stg} (˚C)	Soldering temperature T_{sol}*2 (˚C)
						DC	Pulse				
GM5ZR03200Z	Red	AlGaInP on GaAs	200	70	80	0.93	1.07	5	-30 to +85	-40 to +100	295
GM5ZJ03200Z	Orange	AlGaInP on GaAs	200	70	80	0.93	1.07	5	-30 to +85	-40 to +100	295
GM5ZS03200Z	Sunset orange	AlGaInP on GaAs	200	70	80	0.93	1.07	5	-30 to +85	-40 to +100	295
GM5ZV03200Z	Amber	AlGaInP on GaAs	200	70	80	0.93	1.07	5	-30 to +85	-40 to +100	295

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

*2 For 3s or less at the temperature of hand soldering.

■ Electro-optical Characteristics

(I_F=60mA,T_a=25˚C)

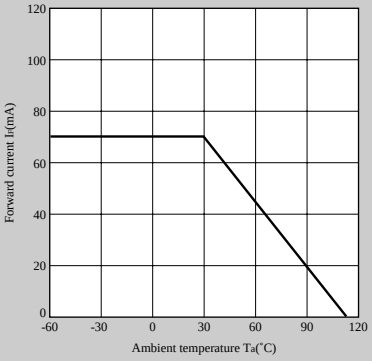
Lens atype	Model No.	Forward voltage V_F(V)		Peak emission wavelength λ_p(nm)	Dominant wavelength λ_d(nm)	Luminous intensity I_V(mcd)	Spectrum radiation bandwidth $\Delta\lambda$(nm)	Reverse current		Page for characteristics diagrams
		TYP	MAX	TYP	TYP	TYP	TYP	I_R(μA) MAX	V_R (V)	
Colorless transparency	GM5ZR03200Z	2.2	2.9	647	635	400	18	100	4	65
	GM5ZJ03200Z	2.2	2.9	627	618	500	18	100	4	65
	GM5ZS03200Z	2.2	2.9	609	605	700	18	100	4	65
	GM5ZV03200Z	2.2	2.9	591	588	500	18	100	4	65

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Internet Internet address for Electronic Components Web site http://sharp-world.com/products/device/index.html

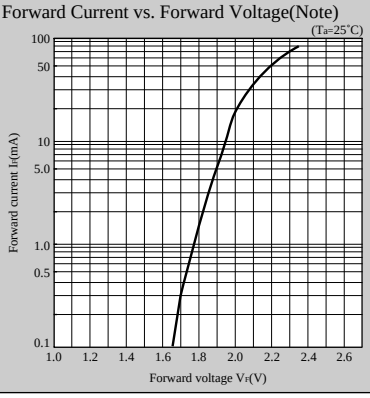
Characteristics Diagrams

GM5Z❑01200A series,GM5Z❑3200Z series

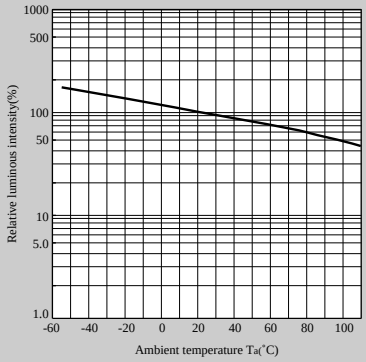
Forward Current Derating Curve



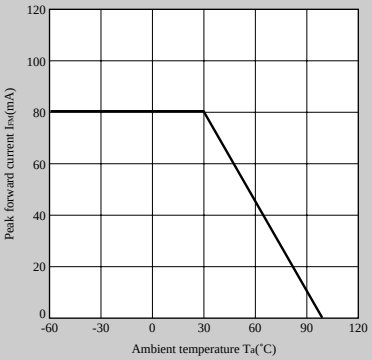
Forward Current vs. Forward Voltage(Note)



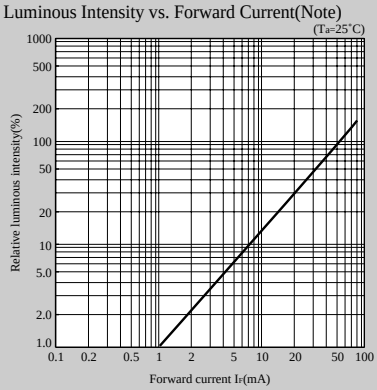
Luminous Intensity vs. Ambient Temperature(Note)



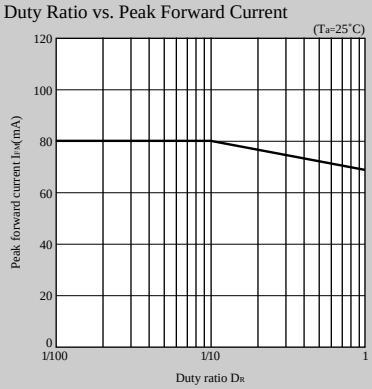
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

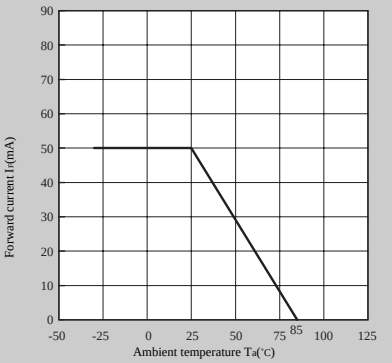


Duty Ratio vs. Peak Forward Current

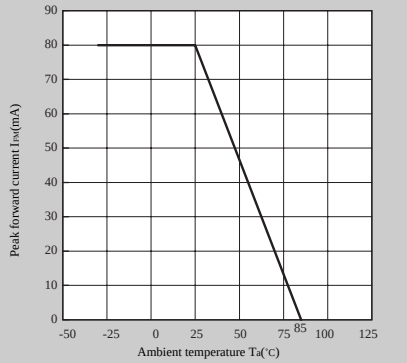


GM5WA02200A/GM5WA06210A/GM5WA06250A/GM5WA06200Z/GM5WA06250Z

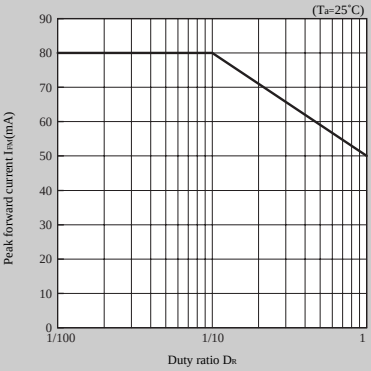
Forward Current Derating Curve



Peak Forward Current Derating Curve

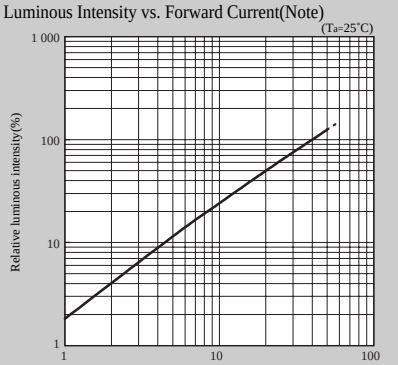


Duty Ratio vs. Peak Forward Current

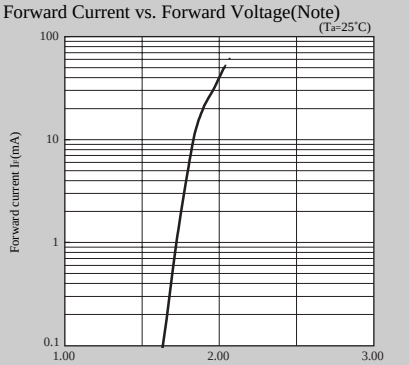


<Red>

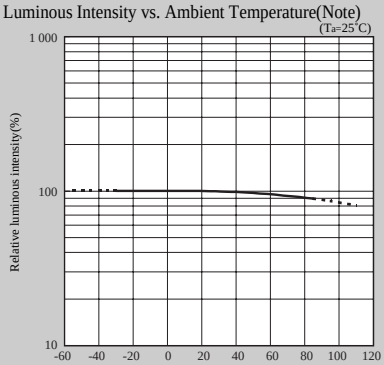
Luminous Intensity vs. Forward Current(Note)



Forward Current vs. Forward Voltage(Note)



Luminous Intensity vs. Ambient Temperature(Note)

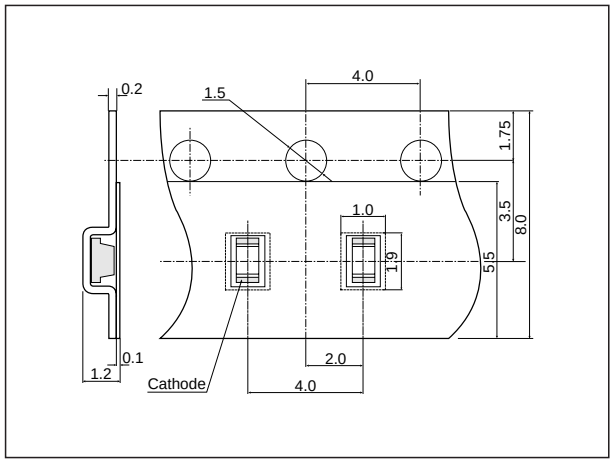


Note)Characteristics shown in diagrams are typical values. (not assurance value)

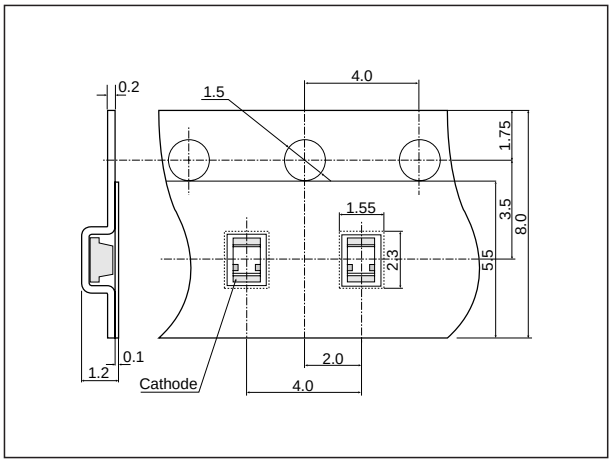
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Taping Specifications

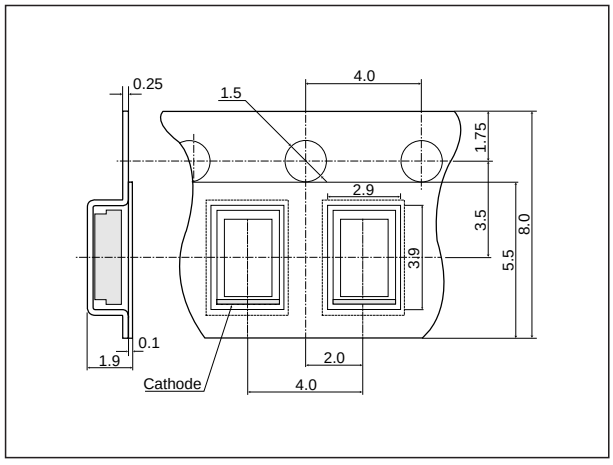
(Unit : mm)



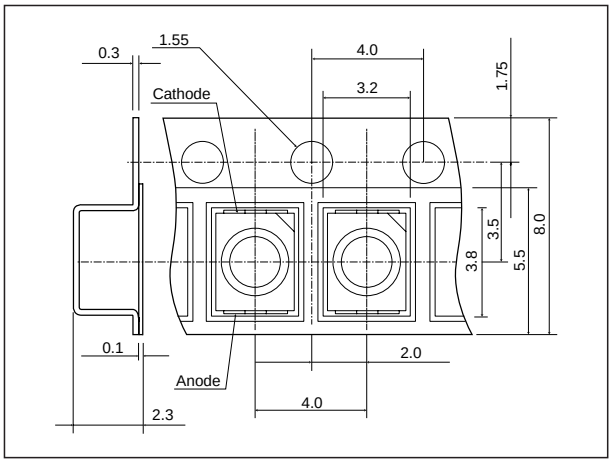
GM1❑❑35200A❑ series 6 000 pcs. /reel
GM1❑❑55200A❑ series 5 000 pcs. /reel
LT1❑❑67A series 4 000 pcs. /reel
LT1❑97A series 5 000 pcs. /reel



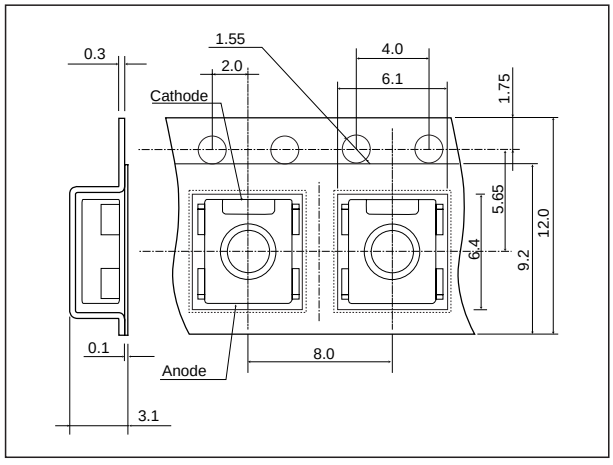
GM1❑❑40300AE series/LT1❑❑40A series 4 000 pcs. /reel



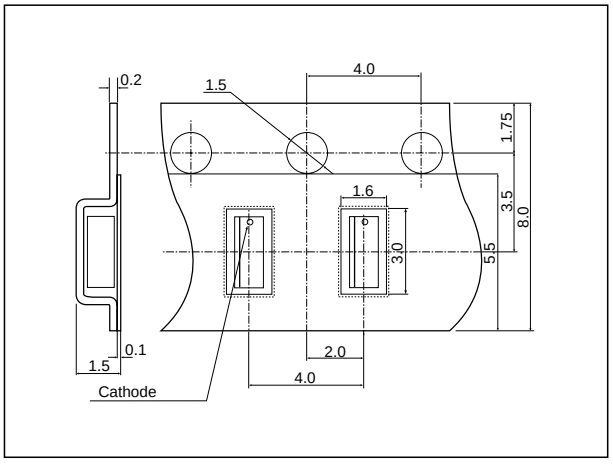
LT1❑90A series 3 000 pcs. / reel



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



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

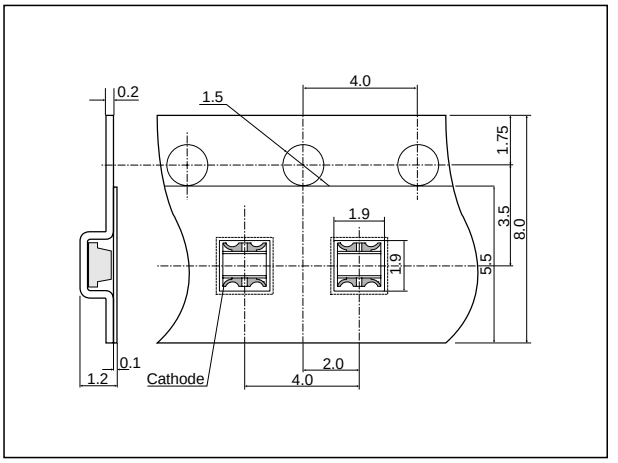


LT1❑❑45A series/GM4❑C13300AC series 3 000 pcs. /reel

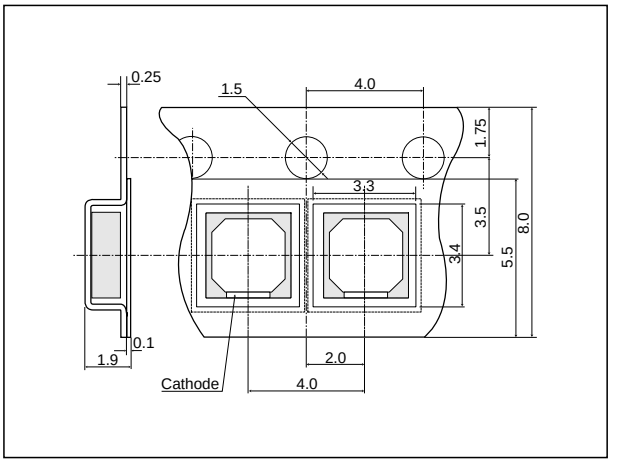
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Taping Specifications

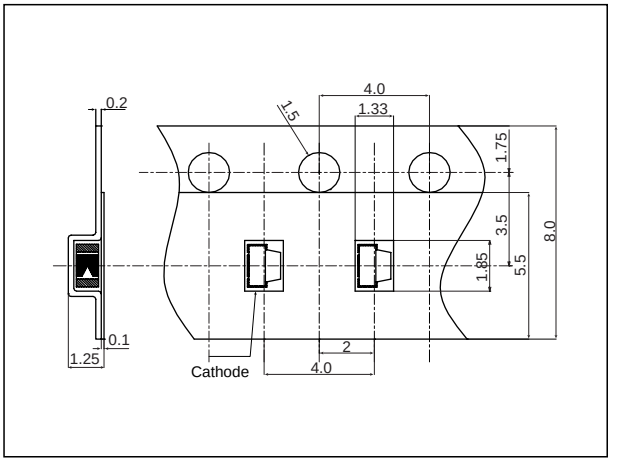
(Unit : mm)



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

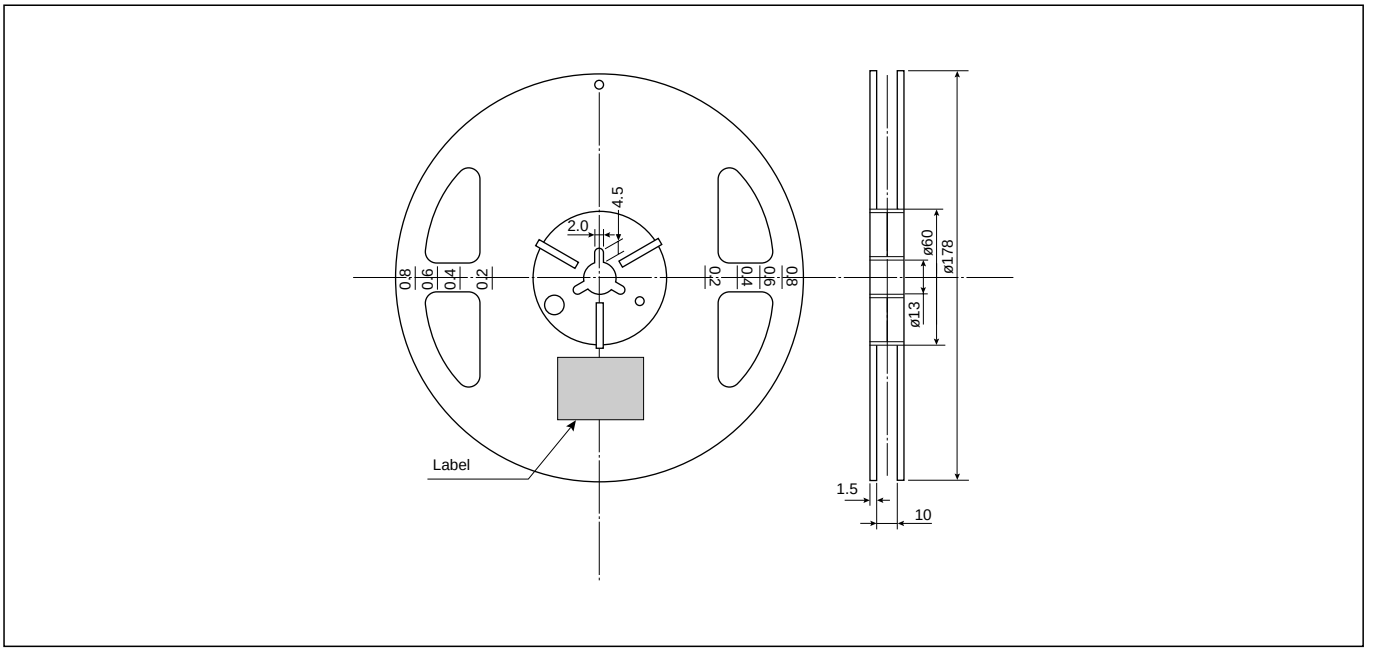


LT1❑❑90A series 3 000 pcs. / reel



GM4❑❑81200A❑ series 4 000 pcs. /reel

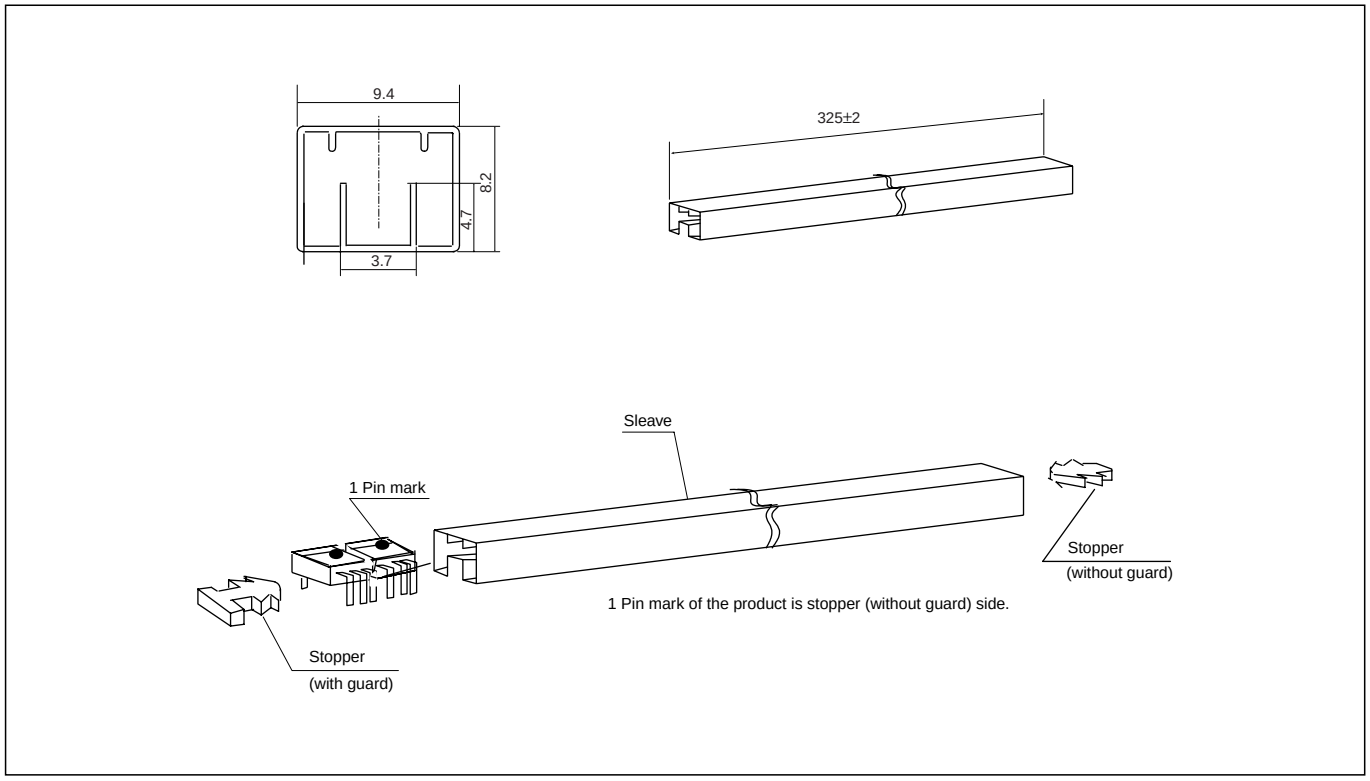
■ Shape and dimension of reel



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Taping Specifications

■Lead type Chip LED (Unit : mm)



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

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— 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:
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— Traffic signals
— Gas leakage sensor breakers
— Alarm equipment
— Various safety devices, etc.

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