

Top View with Super Red LED

Features

- PLCC-2 compatible package.
- Compatible with automatic placement equipment.
- Class 1C ESD sensitive.
- RoHS



M3227

Applications

- Automotive interior lighting
- Indoor and outdoor displays
- Backlighting (LCD, displays, switches, office equipment)
- Indicator
- General use

Device Selection Guide

Part No.	Chip		Lens Color
	Material	Emitted Color	
TSRJ-QT3227-9ZKK	AlInGaP	Super Red	Water Clear

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	VR	5	V
Average Forward Current	IF	30	mA
Peak Forward Current (tp≤10us, Duty Cycle=0.005)	IFP	1000	mA
Power Dissipation	PD	82.5	mW
Electrostatic Discharge (HBM)	ESD	1000	V
Operating Temperature	Topr	-40 ~ +100	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Junction Temperature	Tj	125	°C
Soldering Temperature	Tsol	260 for 5 sec.	°C

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I_v	355	500	900	mcd	IF=20mA
Dominant Wavelength	λ_d	620	623	630	nm	
Spectrum Radiation Bandwidth	Δ λ	-----	25	-----	nm	
Viewing Angle	2θ1/2	-----	120	-----	deg	
Forward Voltage	V_F	1.85	2.00	2.75	V	
Reverse Current	I_R	-----	-----	10	Ma	VR=5V

Notes: Tolerance of Luminous Intensity ±15%

Tolerance of Dominant wavelength ±1.0nm

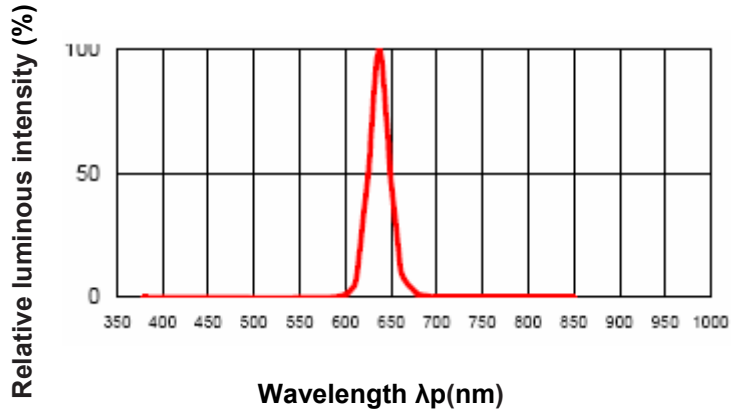
Tolerance of Forward Voltage ±0.05V

Top View with Super Red LED

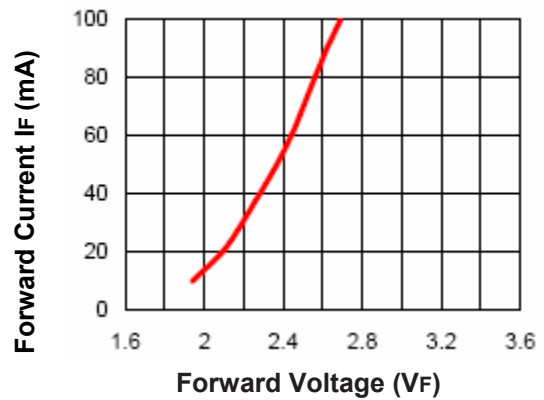
TSRJ-QT3227-9ZKK

Typical Electro-Optical Characteristics Curves (Ta=25°C)

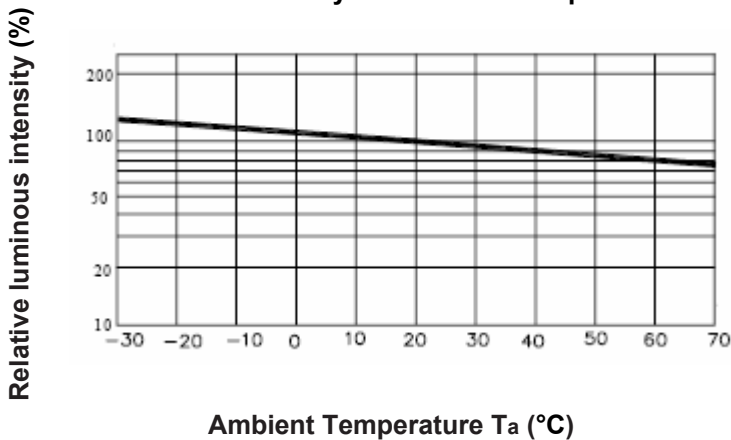
Spectrum Distribution



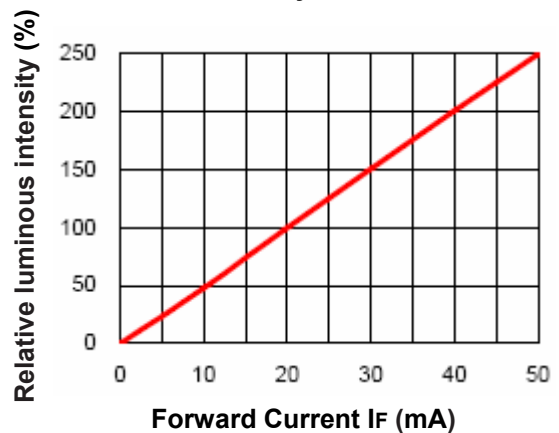
Forward Current vs. Forward Voltage



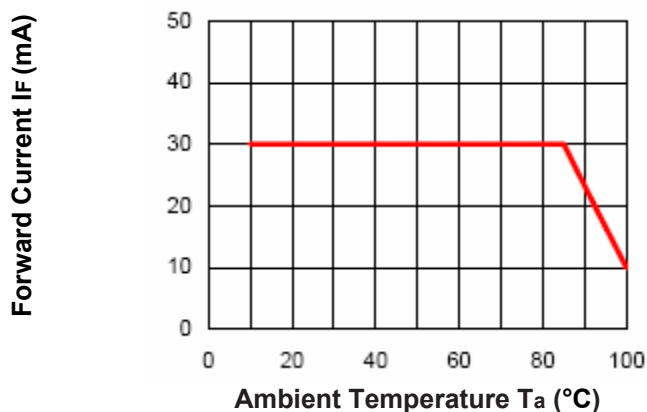
Luminous Intensity vs. Ambient Temperature



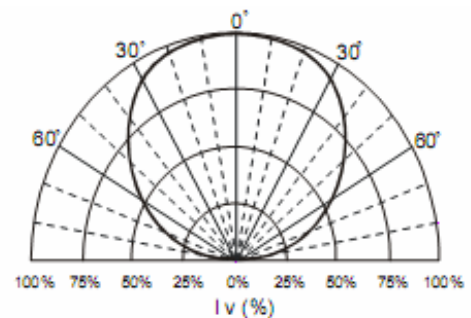
Luminous Intensity vs. Forward Current



Forward Current Derating Curve



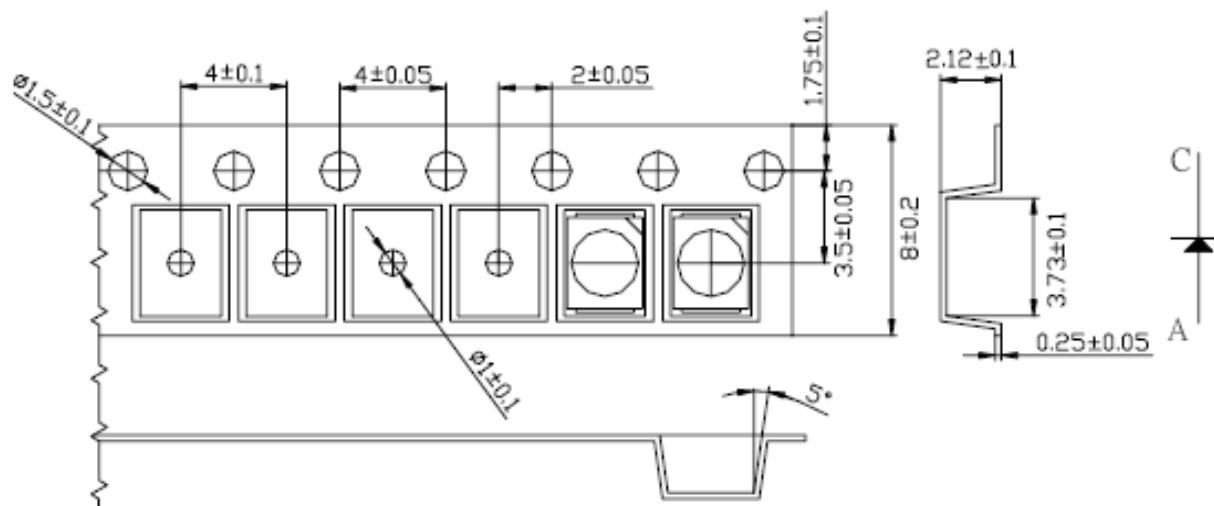
Radiation Diagram



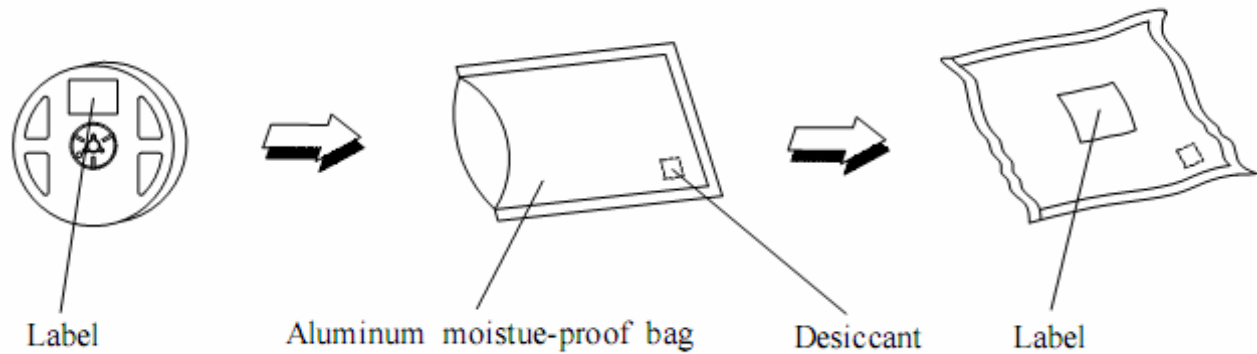
TSRJ-QT3227-9ZKK

[illegible]

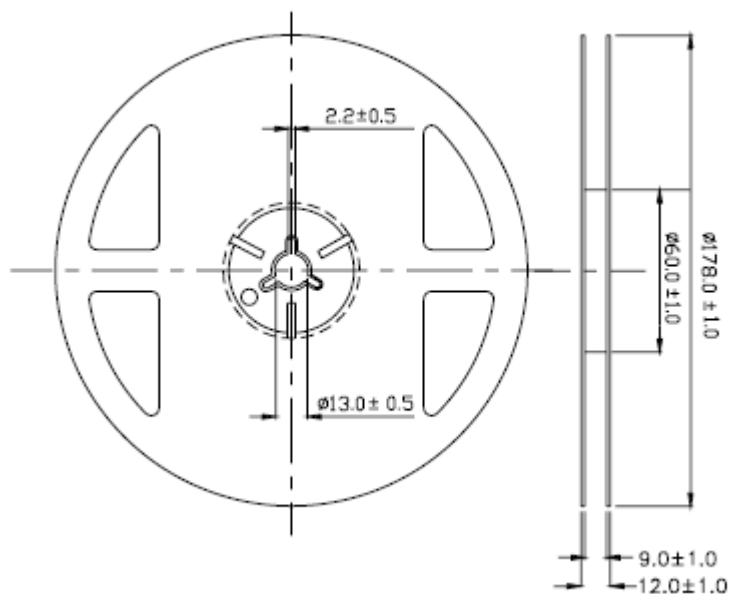
Carrier Tape Dimensions (Unit=mm): Loaded quantity 2000pcs per reel



Moisture Resistant Packaging

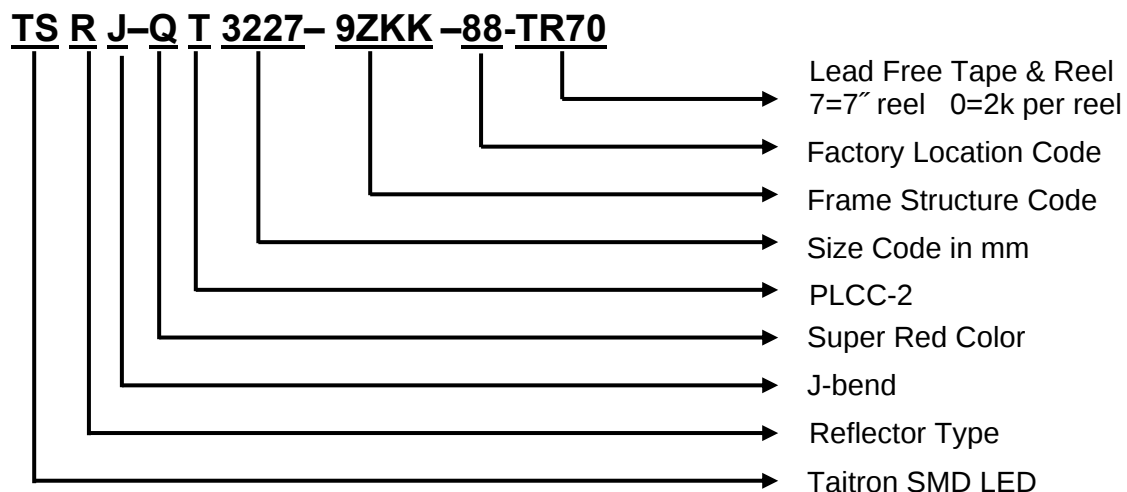


Reel Dimensions (Unit=mm):



Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$.

Ordering Information



Rank Combinations

Bin Range of Dominant Wavelength

Bin Code	Min	Max	Unit	Condition
RZ	620.0	630.0	nm	IF=20mA

Bin Range of Luminous Intensity

Bin Code	Min	Max	Unit	Condition
5T	335.0	450.0	mcd	IF=20mA
4U	450.0	560.0		
5U	560.0	715.0		
4V*	715.0	900.0		

Top View with Super Red LED

TSRJ-QT3227-9ZKK

Bin Range of Forward Voltage

Bin Code	Min	Max	Unit	Condition
3	1.85	2.15	V	IF=20mA
4	2.15	2.45		
5	2.45	2.75		

Notes: Tolerance of Luminous Intensity $\pm 15\%$

Tolerance of Dominant wavelength $\pm 1.0\text{nm}$

Tolerance of Forward Voltage $\pm 0.05\text{V}$

Bin code 4V is with less distribution.

How to contact us

US HEADQUARTER

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 824-8766 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: taitron@taitroncomponents.com

Http://www.taitroncomponents.com

TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO

C.P. 42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

TAITRON COMPONETS INCORPORATED E REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001
BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

TAITRON COMPONETS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN'AN ROAD, SUITE 1503, SHANGHAI 200052, CHINA.

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931