

1.3 mm Height Subminiature , Axial Flat Top LEDs

MODEL NO : 28-21SRC/TR8

■ Features :

- Package in 12mm tape on 7" diameter reels.
- Compatible with automatic placement equipment.
- Compatible with infrared and vapor phase reflow solder process.
- I.C. compatible.
- EIA std package.
- Mono-color type.

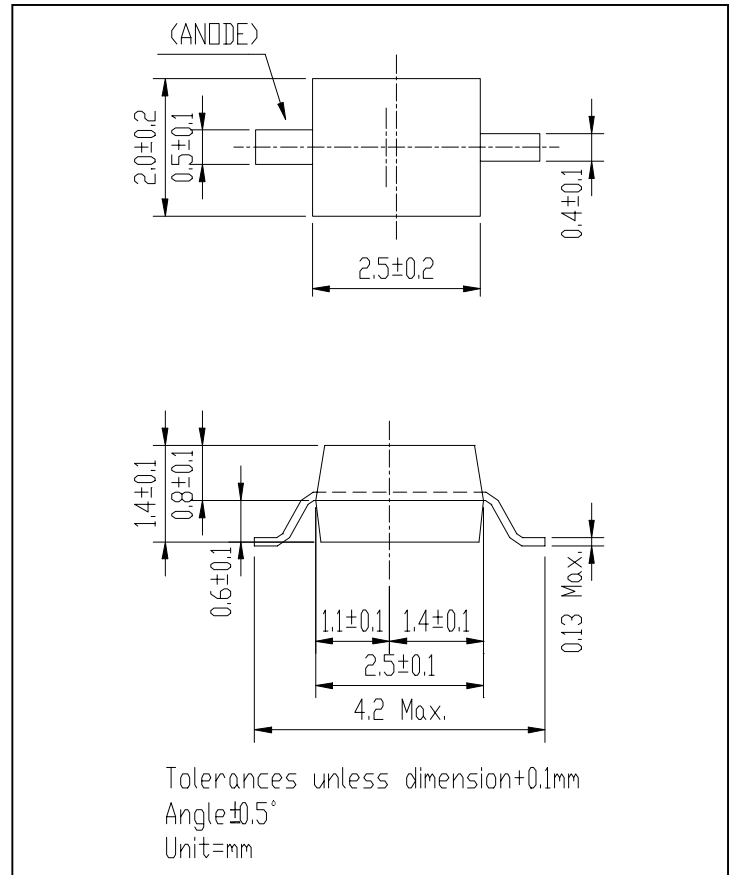
■ Descriptions :

- The 28-21 SMD taping is much smaller than leaded components. Thusenable smaller board size.Higher packing density. Reduced storage space and finally smaller equipment to be obtained.
- Besides, light weight makes them ideal for miniature application, etc.
- Furthermore by automation assembly machines the accuracy is anticipated.

■ Applications :

- Small indicator for outdoor applications.
- Flat backlight for LCD, switch and symbol.
- Indicator and backlight in office equipment.
- Indicator and backlight for battery driven equipment.
- Indicator and backlight for audio and video equipment.
- Automotive : backlighting in dashboard and switch.
- Telecommunication : indicator and backlighting in telephone and fax.
- General use.

■ Package Dimensions :



PART NO.	CHIP		Lens Color
	Material	Emitted Color	
28-21SRC/TR8	GaAlAs	Super Red	Water Clear

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http: //www.everlight.com



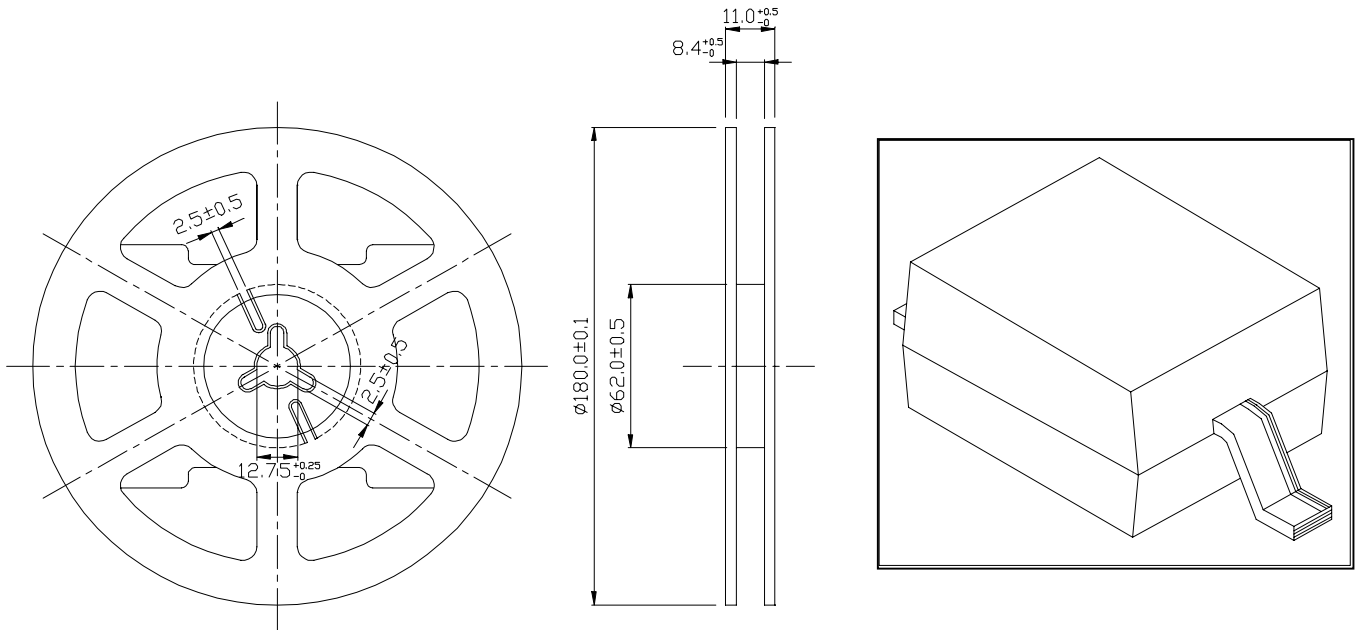
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DEVICE NUMBER : DLE-282-027 REV : 1.2
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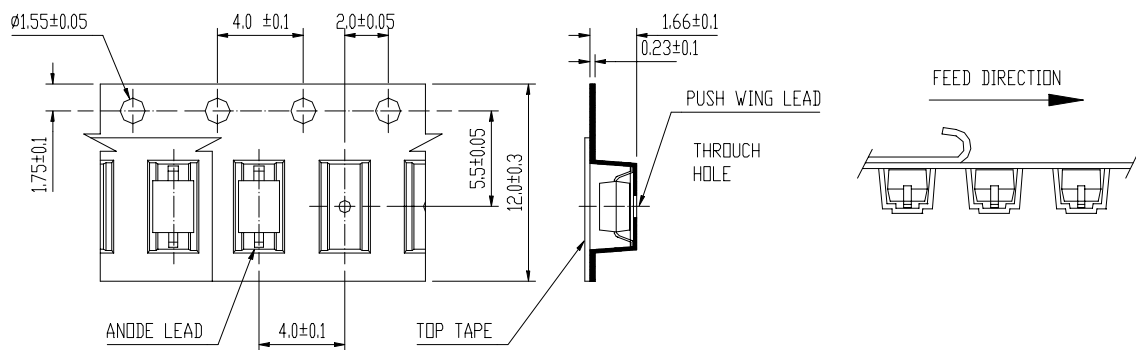
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■ Package Dimensions



■ Loaded Quantity Per Reel 2000 Pcs/Reel



1. All dimensions are in millimeters.
2. Lead spacing is measured where the lead emerge from the package
3. Protruded resin under flange 1.5 mm (0.59") max.



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■ Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	If	40	mA
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Soldering Temperature	Tsol	260 ± 5 for 5 sec	°C
Power Dissipation	Pd	110	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	If(Peak)	180	mA

■ Electronic Optical Characteristics :

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous intensity	Iv	70	100	----	mcd	If = 20 mA
Viewing Angle	2θ 1/2	----	150	----	deg	
Peak Wavelength	λ p	----	660	----	nm	
Dominant Wavelength	λ d	----	643	----	nm	
Spectrum Radiation Bandwidth	△ λ	----	20	----	nm	
Forward Voltage	Vf	1.5	1.7	2.4	V	
Reverse Current	Ir	----	----	10	μ A	Vr=5V



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Reliability Test Item And Condition

NO.	Item	Test Conditions	Test Hours/ Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260 ± 5	5 sec	76 pcs	0/1
2	Temperature Cycle	H : +85 30 min ↑ 5 min ↓ L : -55 30 min	50 cycle	76 pcs	0/1
3	Thermal Shock	H : +100 5 min ↑ 10 sec ↓ L : -10 30 min	50 cycle	76 pcs	0/1
4	High Temperature Storage	TEMP. : +100	1000 hrs	76 pcs	0/1
5	Low Temperature Storage	TEMP. : -55	1000 hrs	76 pcs	0/1
6	DC Operating Life	If = 20 mA	1000 hrs	76 pcs	0/1
7	High Temperature / High Humidity	85 / 85% R.H.	1000 hrs	76 pcs	0/1



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Typical Electro-Optical Characteristic Curves

