

CERLED[®]

Ceramic Chip SMD

SMD - Wide-Viewing Angle
CR 10 UR ultra red



Description

The solder pads provide an excellent heat sink. For multi-colour arrays just choose 2 or more CERLEDs and mount them side by side or even antiparallel.

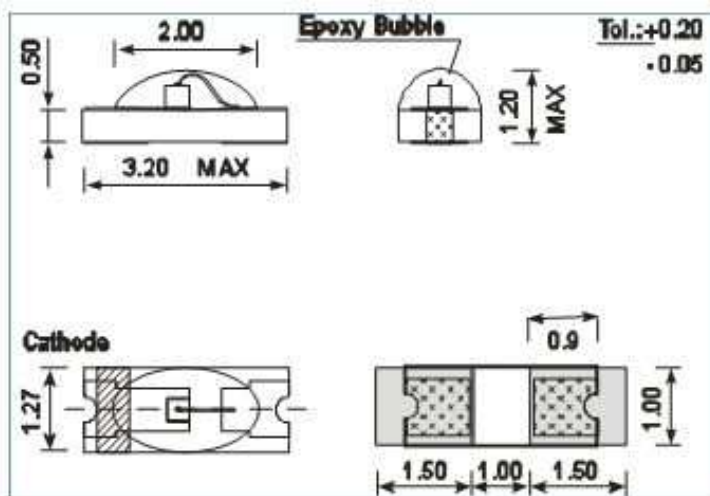
Ideal for backlighting, light piping and status indication in high brightness or low current applications. Small true chip - LED to build custom configurations.

Available on special order in 8 mm blister tape or solid strips of up to 12 pcs with a true pitch of 1.27 mm.

The CR 10 UR has a clear epoxy lens.

Features and Benefits

- ▶ Solid state ceramic chip
- ▶ Surface mounting device
- ▶ High thermal conductivity
- ▶ Superior light uniformity
- ▶ End - to - end and side - to - side stackable down to a pitch of 1.3 mm
- ▶ Solder pads conform with Mil-Std 883 B



Maximum Ratings at 25° C

Power dissipation	P_{Tot}	130 mW
Derating linear		2.2 mW / ° C
Peak forward current	I_{FSM} (10 μ s)	600 mA
Continuous forward current	I_F	70 mA
Junction temperature	T_J	120° C
Storage temperature	T_{st}	-25° C to 120° C
Operating temperature	T_{op}	-25° C to 80° C
Soldering temperature	T_{sold} (10 s)	240° C

Adequate heat sink is required. Derating must be observed to maintain junction temperature below maximum. Please note our recommended solder profile at www.excelitas.com.

Optical and Electronic Characteristics at 25° C

$I_F = 20$ mA, ambient temperature = 25° C

	min	typ	max	unit
Luminous intensity	17	40		mcd
Peak emission wavelength		660		nm
Spectral half bandwidth		20		nm
Forward voltage		1.8	2.2	V
Reverse leakage			100	μ A
Reverse voltage	5			V
Light emission angle		180°		Degree

Note: according IEC 60825-1 (EN60825):

LED Radiation

Do not view directly with optical instruments.

Figure 1

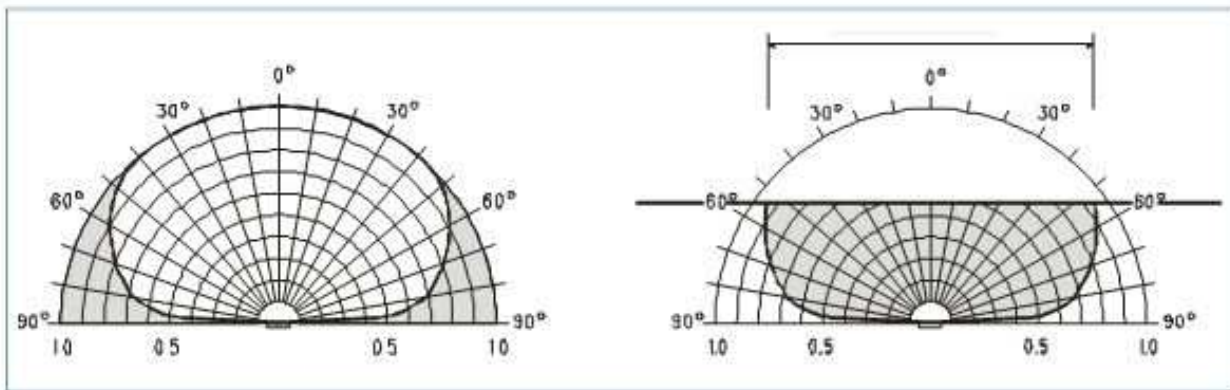


Figure 2
Suggested Mounting Method

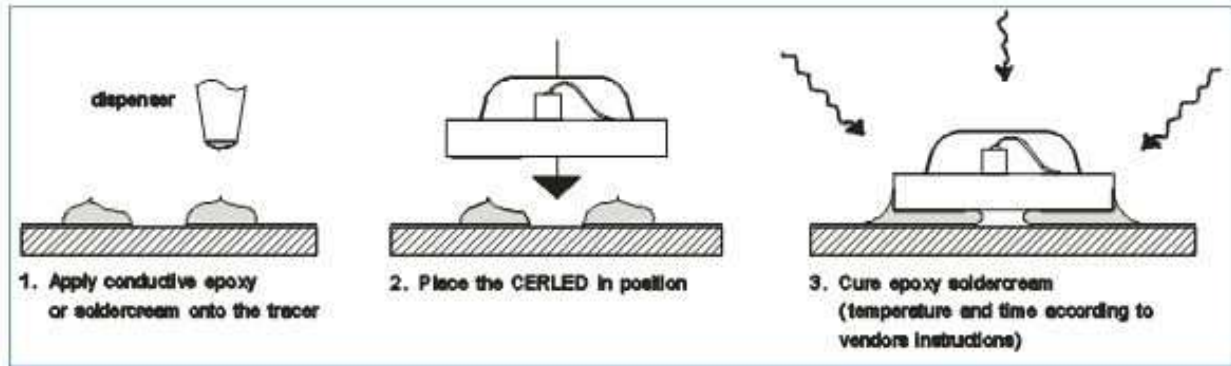


Figure 3
Special Packaging Standard 8 mm Blister Tape

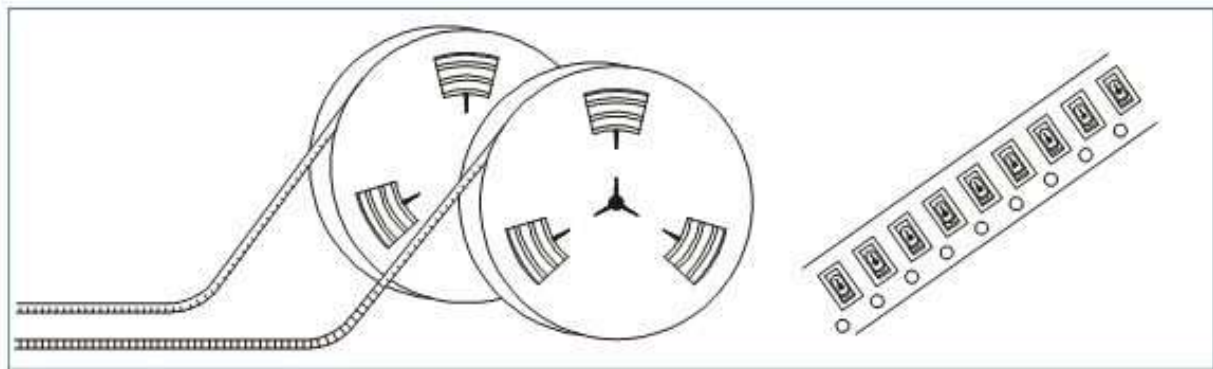
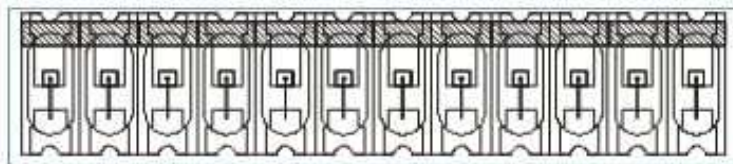


Figure 4
Arrays: Available in strips up to 12 CERLEDs with a max. pitch tolerance in spacing and linearity of ± 0.01 mm between chip centers.



Code to order strips:
CR 10 ur - XX (no. of LEDs)

Excelitas Technologies
European Customer
Support for LED Solutions
Luitpoldstrasse 6
85276 Pfaffenhofen, Germany
Telephone: (+49)8441-8917-0
Fax: (+49)8441-71910
generalinquiries@excelitas.com

European Headquarters
Wenzel-Jaksch-Strasse 31
65199 Wiesbaden, Germany
Telephone: (+49)611-492-247
Fax: (+49)611-492-170

North America
Customer Support Hub
22001 Dumberry Road
Vaudreuil-Dorion, Quebec
Canada J7V 8P7
Telephone: (+1) 450-424-3300
(+1) 866-574-6786 (toll-free)
Fax: (+1) 450-424-3345

Asia Customer Service Hub
47 Ayer Rajah Crescent #06-12
Singapore 139947
Telephone: (+65)6775-2022
(+65)67704-366
Fax: (+65)6775-1008

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