

CERLED[®]

Ceramic Chip SMD

SMD - Wide-Viewing Angle
CR 50 UR ultra red



Description

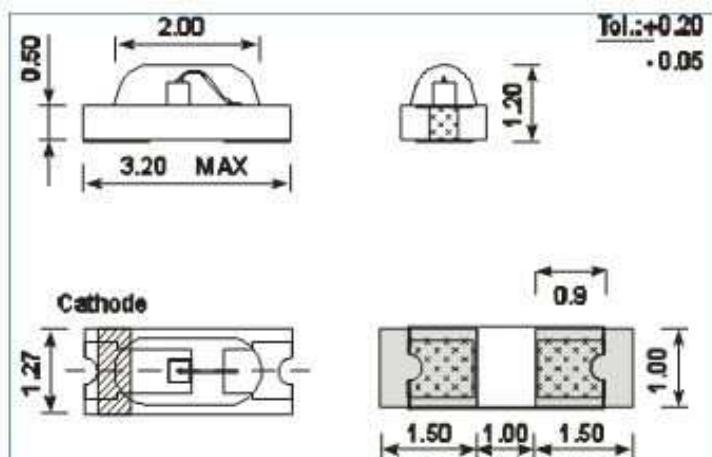
The solder pads provide an excellent heat sink. For multi-colour arrays just choose 2 or more CERLEDs and mount them side by side or even antiparallel.

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 50 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

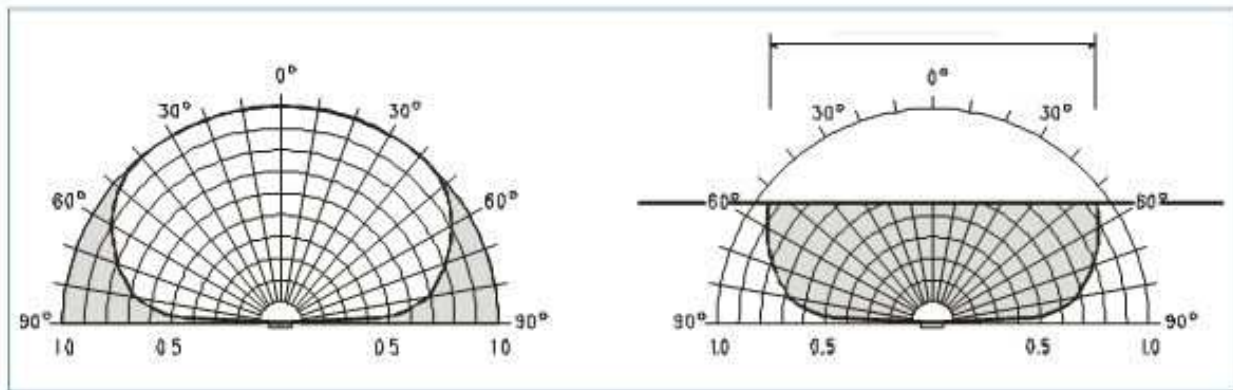


Figure 2
Suggested Mounting Method

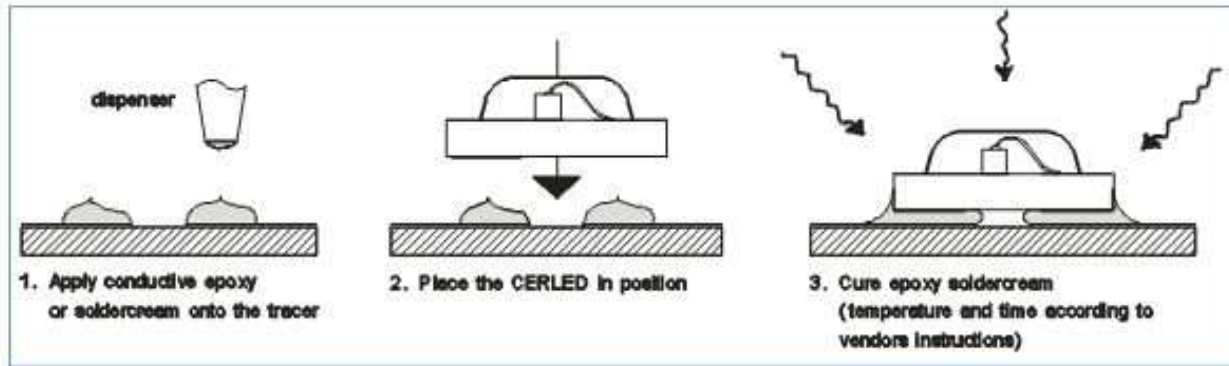


Figure 3
Special Packaging Standard 8 mm Blister Tape

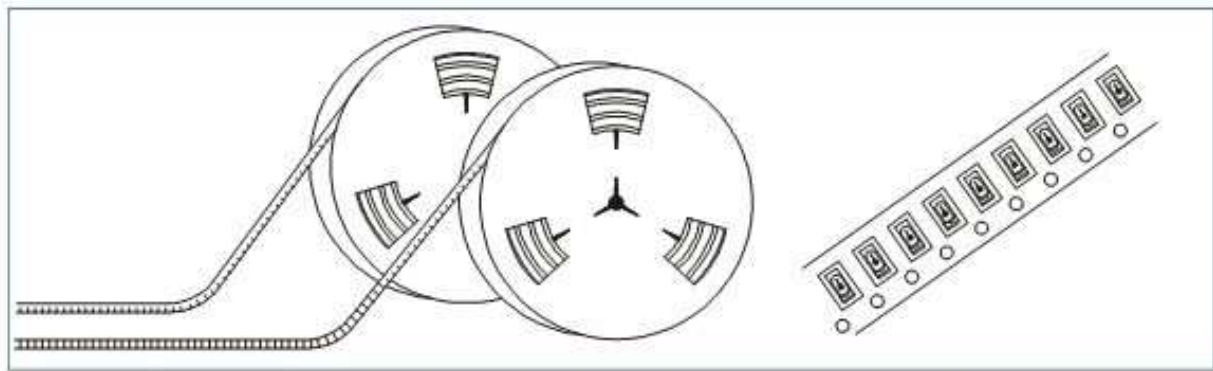
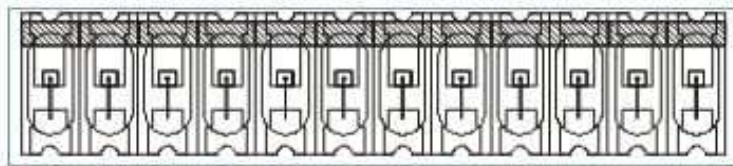


Figure 4
Arrays: Available in strips up to 12 CERLEDs with a max. pitch tolerance in spacing and linearity of ± 0.01 mm between chip centers.



Code to order strips:
CR 50 ur - XX (no. of LEDs)

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