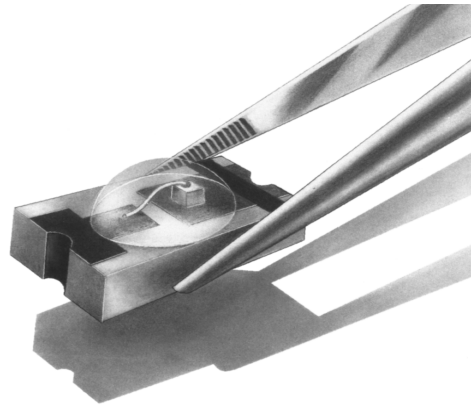


CERLED[®]

Ceramic Chip SMD

SMD – Wide-Viewing Angle
CR 10 SR / CR 12 SR super red



Description

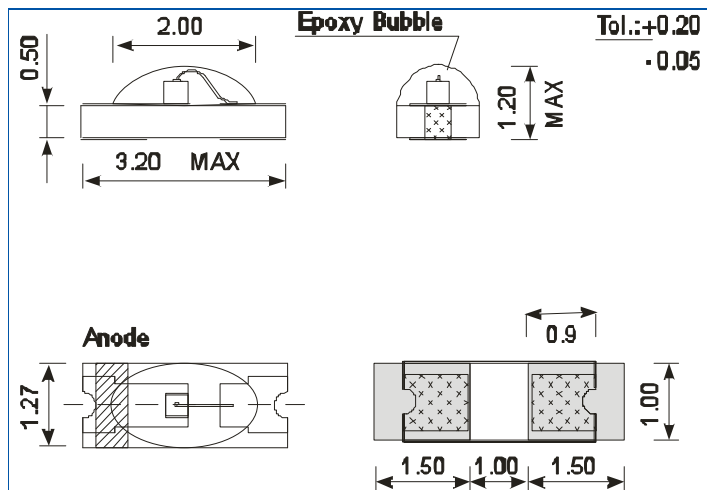
The solder pads provide an excellent heat sink. For multi-chip arrays just choose 2 or more CERLEDs and mount them side by side or even antiparallel. Ideal for back - light applications. Small true chip - LED to build custom configurations.

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 SR has a clear red coloured epoxy lens. The CR 12 SR has a diffused red coloured 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		2.7 mW / °C
Peak forward current	I_{FSM} (10 μ s)	800 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.optoelectronics.perkinelmer.com.

Optical and Electronic Characteristics at 25 °C

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

	min	typ	max	unit
Luminous intensity	10	15		mcd
Peak emission wavelength		655		nm
Spectral half bandwidth		20		nm
Forward voltage		1.85	2.3	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

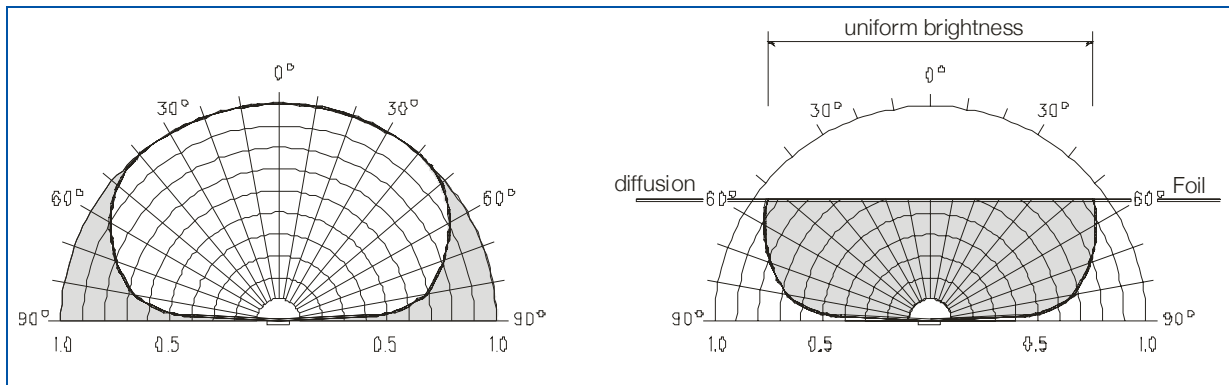




Figure 2
Suggested Mounting Method

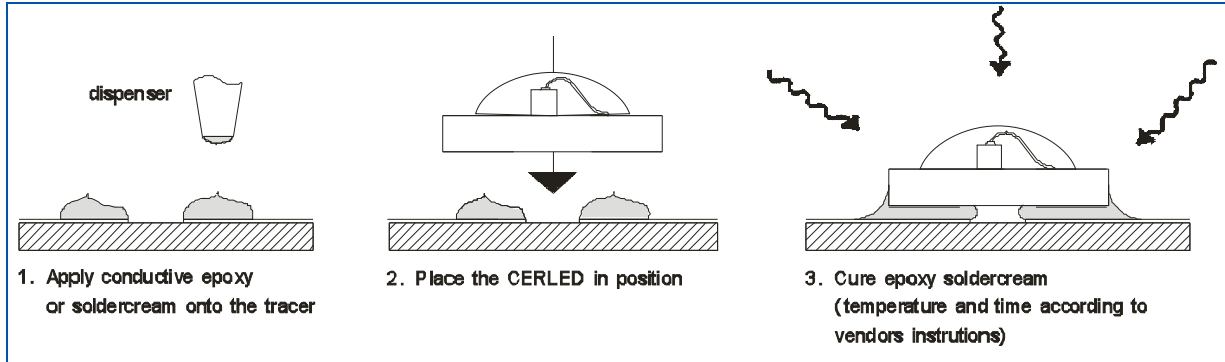


Figure 3
Special Packaging Standard 8 mm Blister Tape

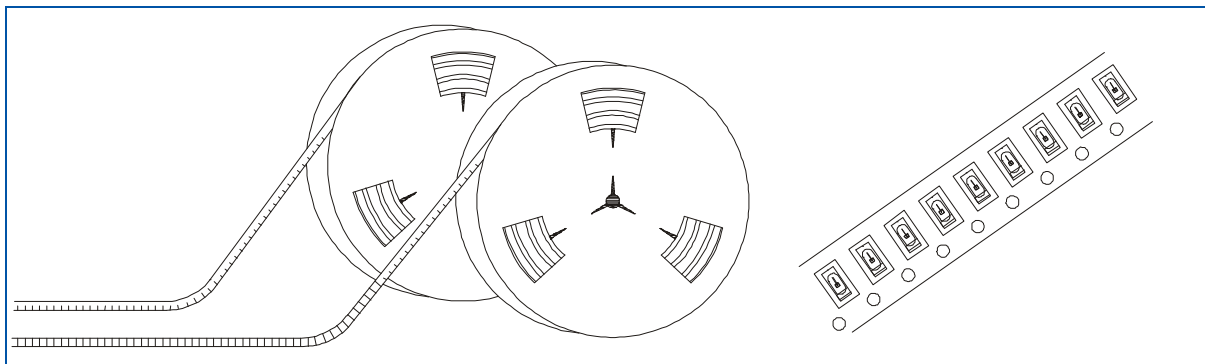
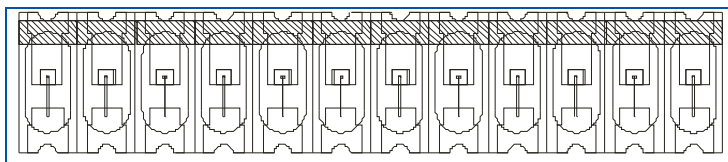


Figure 4
Arrays: Available in strips up to 12 CERLEDs with a max. pitch tolerance in spacing and linearity of ± 0.01 mm between chip centers.



Code to order strips:
CR 10 sr – XX (no. of LEDs)

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