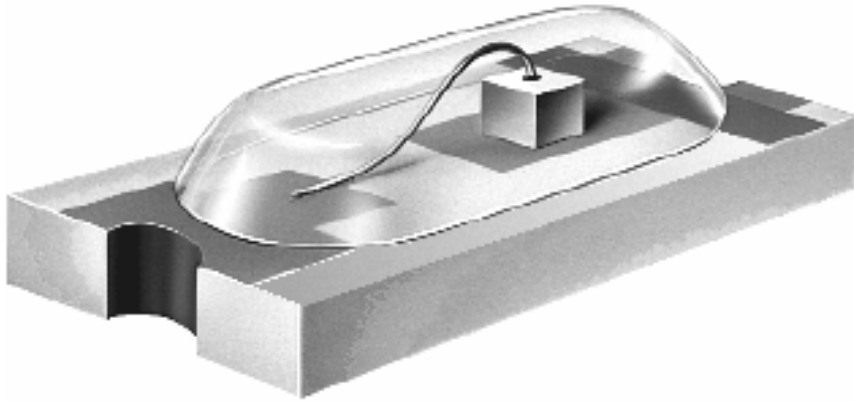


CERLED[®]

Ceramic Chip SMD

SMD – Wide-Viewing Angle
CR 50 TE Photo Transistor



Description

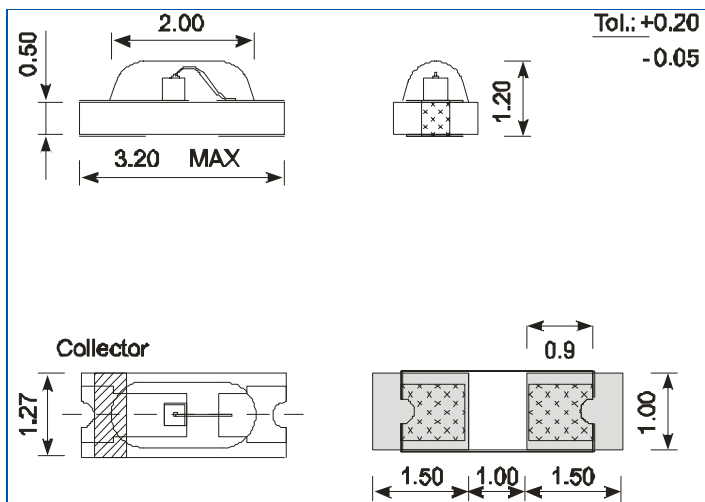
The solder pads provide an excellent heat sink. For multi-sensors just choose 2 or more CERLEDs. Clear epoxy lens.

Special Type (CR50TE-DLF) with daylight filter on request.

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.

Features and Benefits

- ▶ Solid state ceramic chip
- ▶ Surface mounting device
- ▶ High thermal conductivity
- ▶ 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

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

Optical and Electronic Characteristics at 25 ° C

	min	typ	max	unit	conditions
Collector emitter breakdown voltage (V_{CE})	40			V	$I = 100 \mu A$
Dark current (I_{CEO})			400	nA	$V_{CE} : 20V, E_v : 0Lx$
Saturation voltage (V_{CEsat})			0.3	V	$I_C : 2 mA, I_B : 1000 \mu A$
Wavelength of max. sensitivity (λ_{max})		900		nm	
Photo current rise / fall time (t_{on} / t_{off})		4		μs	$R_L = 50 \Omega, f = 1 MHz$
Photosensitive area (A)		0.18		mm ²	
Power dissipation (P_{tot})		200		mW	
Current gain (h_{FE})	1000		1800		$V_{CE} = 5V, I_B = 3 \mu A$

Figure 1

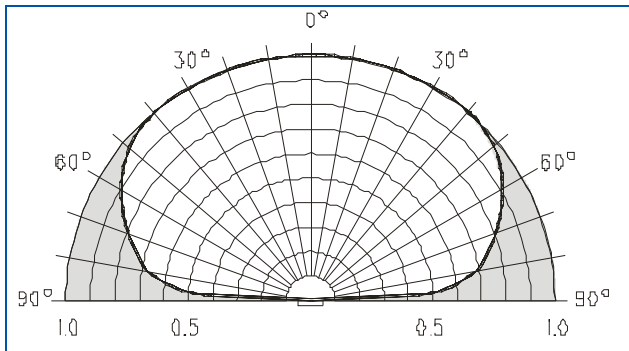


Figure 2

Suggested Mounting Method

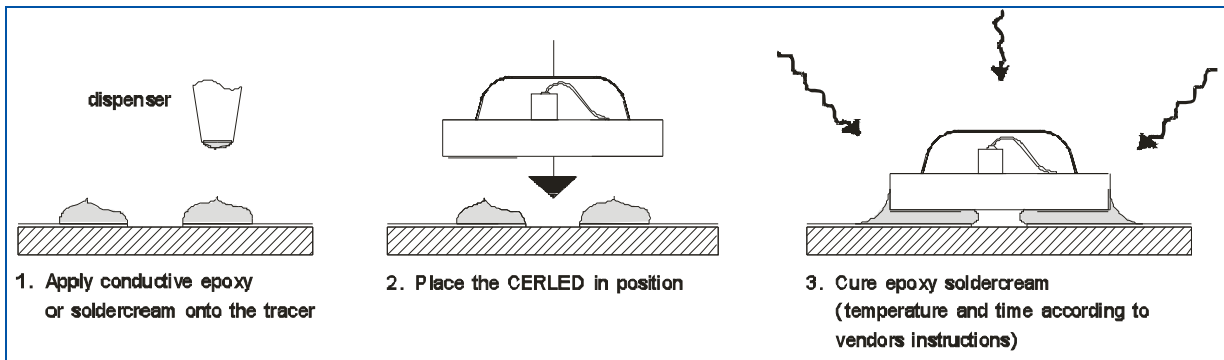




Figure 3

Special Packaging Standard 8 mm Blister Tape

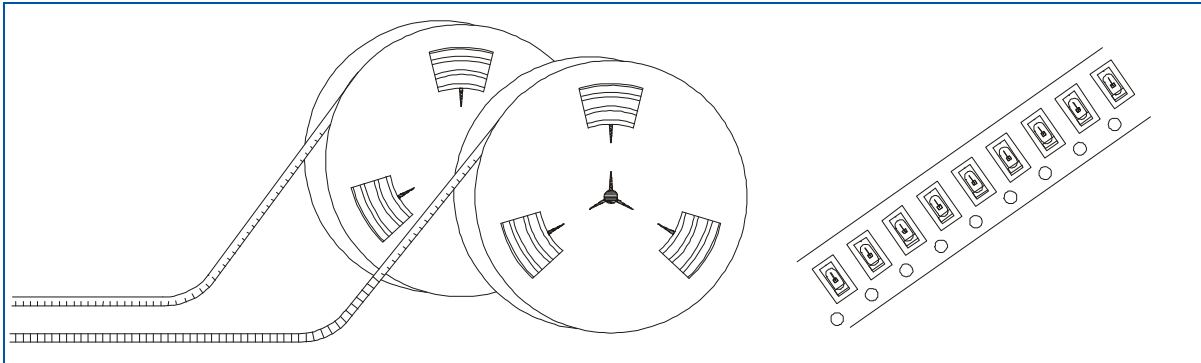
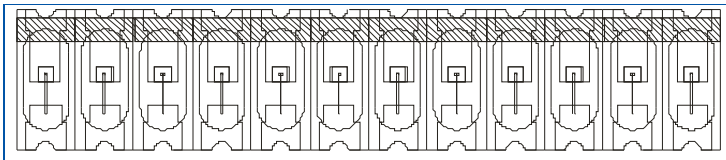


Figure 4

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 te – XX (no. of LEDs)

PerkinElmer Elcos GmbH
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