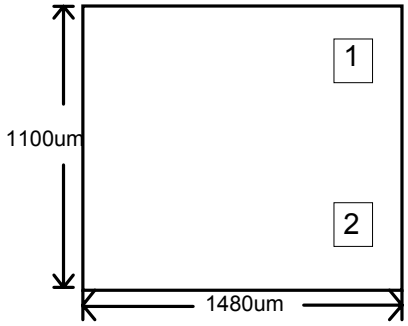
OTC-091
LOW BATTERY DETECTOR
WITH BLINKING LED DRIVER

● Features

* CMOS technology
* Designed for bonding with LED chip
* Input voltage range: 2V-10V DC
* Low standby current: 5 μA for V_{IN}=3V
* Blinking frequency: 1.6Hz±20%
* Blinking duty cycle: 1/16
* Can detect two1.5V batteries without any external parts
* Build-in detection voltage hysteresis design
* With source blinking led driver to indicate low-battery condition

● Pad assignment & description



(SCRIBE LINE INCLUDED)

PAD1-SOURCE SOURCE OUTPUT
PAD2-VSS NEGATIVE POWER SUPPLY

NOTE:SUBSTRATE IS CONNECTED TO VI

● Ordering informations

Part no.	Package	Note
OTC-091	-	Chip form
OTC-091A	2 Lead red diffused type(ϕ)	Bonding with ED-211SRD LED chip wavelength λp(typ) 660nm , Intensity (6mA), Iv(minimum) 3mcd
OTC-091B	2 Lead red diffused type(ϕ)	Bonding with ED-211SRD LED chip wavelength λp(typ) 660nm , Intensity (6mA), Iv(minimum) 3mcd

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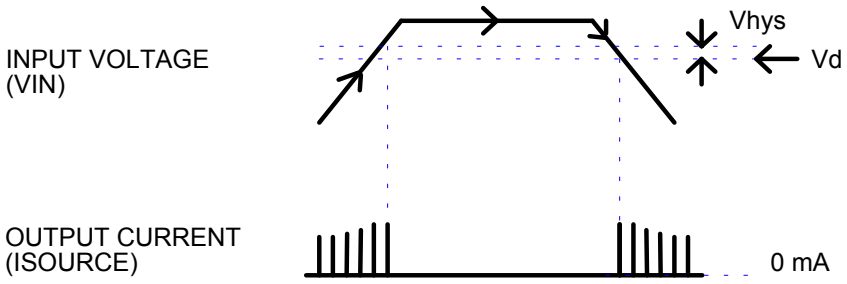
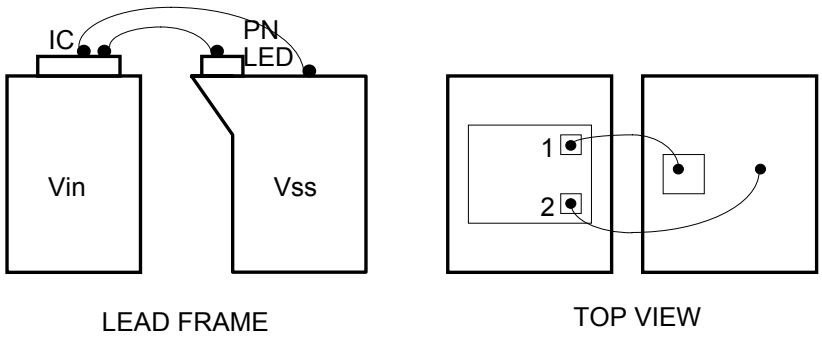
● Electrical characteristics

Ta = 25℃, V_{IN} =3V (Unless otherwise specified)						
Characteristic	Symbol	Condition	Min	Typ	Max	Unit
Input voltage	V_{IN}		2	3	10	V
Standby current	I_{IN}			5		μA
Detection voltage	V_D		2.35	2.5	2.65	V
Hysteresis voltage	V_{hys}			100		mV
Blinking frequency	F_{BLK}		1.2	1.6	2	Hz
Output source current	I_{SOURCE}	V_{IN}=2.3V		6		mA

● Function description



● Bonding with LED chip



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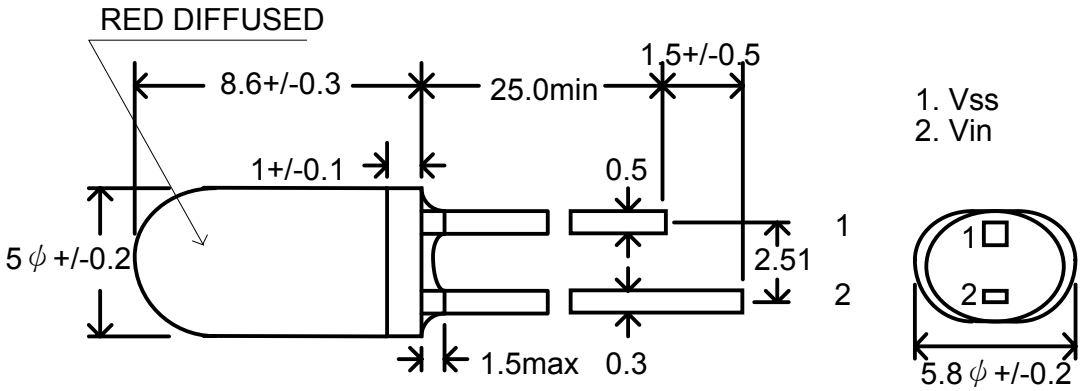
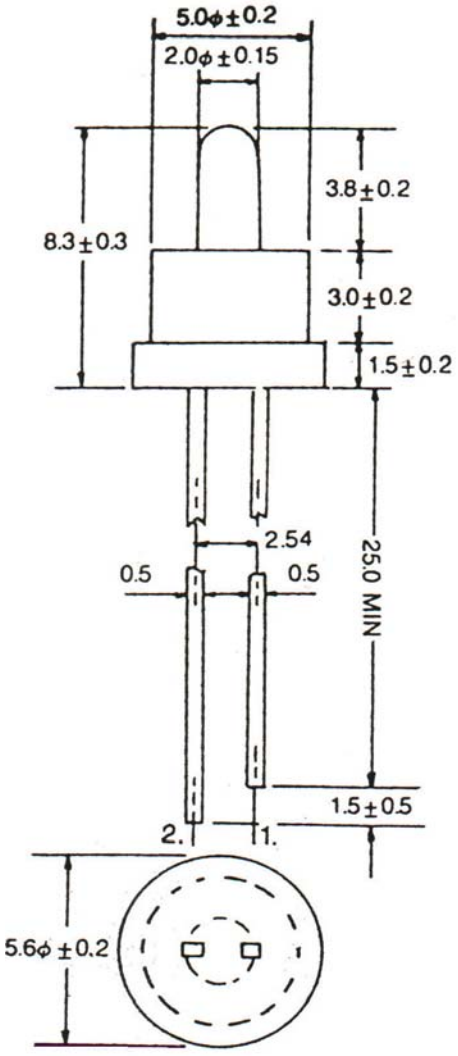
PACKAGE DIMENSIONS

- OTC-091A (UNIT: mm)



- OTC-091B
  1. V_{SS}
  2. V_{IN}



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