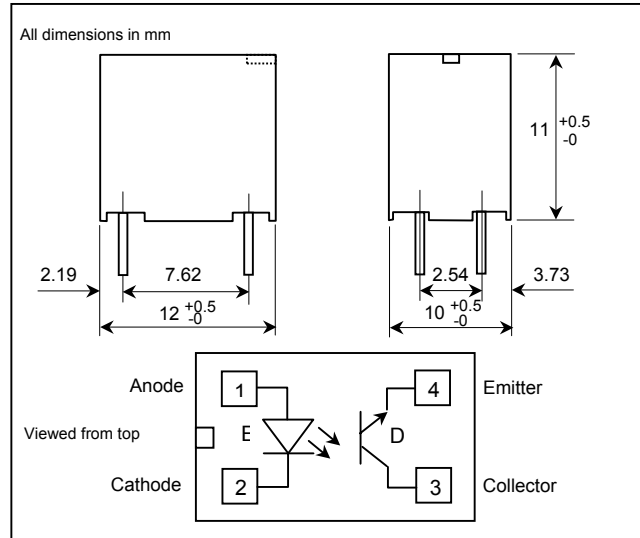
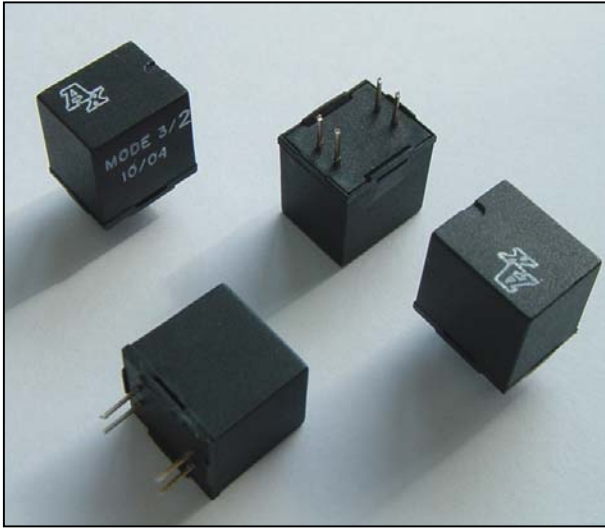


Non-Mercury Tilt Sensor - Mode 3/2 – C12-1095

(Vertically Mounted, Normally Open, Omni-directional, 25° + anti tip-over)

TuControls
Limited

The TuControls non-mercury, mode 3/2, normally open tilt sensor is suitable for vertical PCB mounting & is housed in a small, robust moulded package, 11mm x 12mm x 10mm in size. The operate angle is 25°±2 from the vertical, omni-directionally with an anti tip-over function (see operation mode). Using solid-state technology, this low powered device is suitable for CMOS logic. As a primary sensing device, the tilt sensor can be interfaced to standard TTL, or power devices & additional circuitry can be supplied for the operation of power transistors & FET's, enabling solenoids, motors & lamp loads to be switched.



Technical Characteristics

Emitter						
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Fwd Voltage	V _F	-----	1.45	1.7	V	I _F = 20mA
Cont. Fwd Current	I _F	-----	20	100	mA	V _F =5V
Rev. Voltage	V _R	-----	-----	5	V	I _R =100µA
Power Dissipation	P _M	-----	-----	170	mW	-----
Detector						
Coll. Emitt. V	V _{CEO}	-----	-----	30	V	I _C =100µA
Emitt. Coll. V	V _{ECO}	-----	-----	6	V	I _E =100µA
Coll. Emitt. Leak. I	I _{CEO}	-----	-----	100	nA	V _{CE} =10V
On-state Current	I _{C(ON)}	2	-----	5	mA	V _{CE} =25V
Coll. Emitt. Sat. V	V _{CE(SAT)}	-----	-----	0.4	V	I _C =2.0mA, I _B =100µA
Power Dissipation	P _M	-----	-----	100	mW	-----
Operating Specification						
Operating	Op	23	25	27	Deg	I _F =20mA
Release (from Op.)	Rel	8	10	12	Deg	I _F =20mA
Operating Temp.	Temp	-10	-----	+70	°C	I _F =20mA, I _C =10mA
Soldering Temp.	TSOL	-----	-----	+260	°C	For 5 Seconds

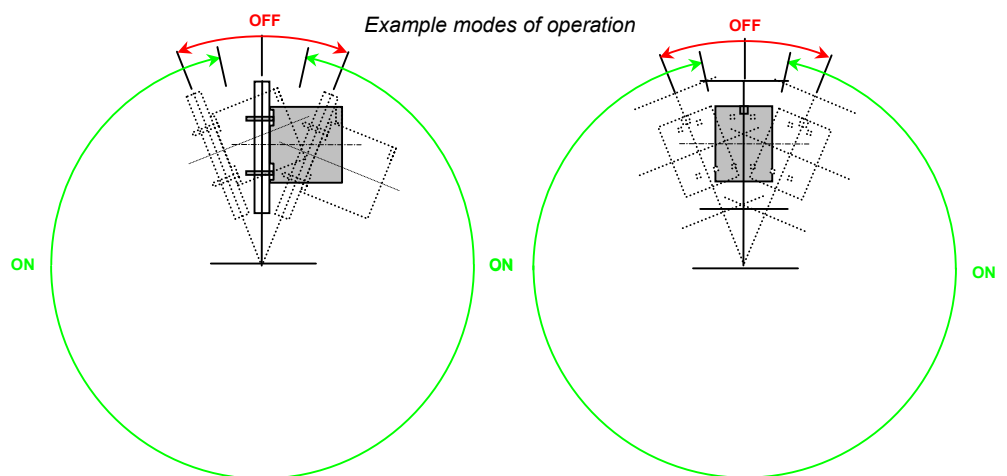
Features:

- RoHS Compliant
- Small robust construction
- Printed circuit board mounting
- Optical coupling
- Low power consumption
- Optional interface circuitry available
- Other tilt angles available
- Other "modes" of operation available

Typical Applications:

- Emergency shutdown
- Door / barrier position sensing
- Cam / motor position indicator
- Movement alarm

Important Note: Suitable for PCB washing, but not total immersion.



RJB/10/05/2

TuControls Limited reserve the right to change this data sheet without giving notice

TuControls Limited

15/16 Jubilee End, Dale Hall Industrial Estate, Lawford,
Essex. CO11 1UR, United Kingdom.

Telephone: +44 (0) 1206 395661

Fax: +44 (0) 1206 393714

E-mail: sales@TuControls.com

Web: www.TuControls.com