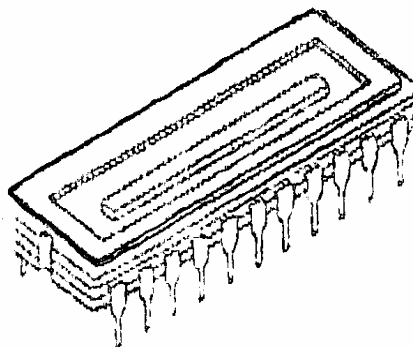


CDD LINEAR IMAGE SENSOR**TCD102D**

The TCD102D is a high resolution and high sensitivity 2048-element linear image sensor. The sensor is designed for Facsimile readers, optical character Recognition and other optical application ,The device contains a row of 2048 photodiodes which provide a 8 lines/mm resolution across a B4 size paper.

The TCD102D is capable of high speed operation up to a 3MHz data rate and incorporate on chip sample and hold circuitry.

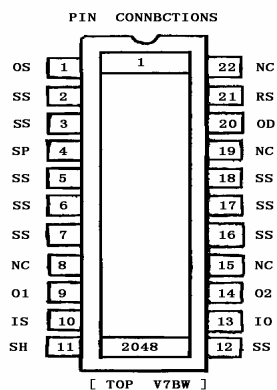


| | | |
|----------------------------------|---|------------------------------|
| Number of Image Sensing Elements | : | 2048 |
| Image Sensing Element Size | : | 14pm by 14pm on 14pm centers |
| Photo Sensing Region | : | High sensitive an photodiode |
| Clock | : | 2-phase |
| On-ship circuitry | : | Sample-and-held circuitry |
| Dynamic Range | : | 600(Type) |
| Package | : | 22 pin Cerdip |

MAXIMUM RATINGS (Note 1)

| CHARACTERISTIC | SYMBOL | RATLNG | UNLT |
|-------------------------------|-----------|----------|------|
| Clock pulse voltage | V_o | -0.3-1.5 | V |
| Shift pulse voltage | V_{sh} | | |
| Reset pulse voltage | V_{rs} | | |
| Sample and hold pulse voltage | V_{sp} | | |
| Power supply voltage | V_{op} | | |
| Input cate voltage | V_{tg} | | |
| Input source voltage | V_{ts} | | |
| Operating temperature | T_{opr} | -25-60 | °C |
| Storage temperature | T_{stg} | -40-100 | °C |

(Note 1) All voltage are with respect to ss terminals.



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