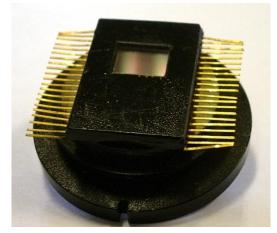


## FRAME TRANSFER CCD 20M

CCD 20M is a silicon frame transfer photosensitive device with two sections, bulk n-channel and a substrate of p-type.

Accumulation section comprises 290 lines, 532 pixels per a line. First nine columns and last three columns are shielded from light. Storage section comprises 290 lines, 532 pixels per a line. Overall number of elements in an output register is 545, the first eleven and last two pixels are supporting.



CCD 20M is intended for operation in special TV equipment with standard and low-frequency scanning modes, image transformation and processing systems as well as measurement instruments.

## Advantages:

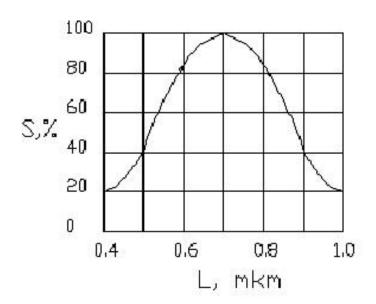
- Operation at 1-10sec storage time
- Operation at temperature up to + 100°C
- The device could be produced with fiber-glass optic input and embedded in cooled / uncooled package.

## **SPECIFICATIONS**

Pixel number, (HxV)	580×520
Photosensitive area size, mm	6.6×8.8
Pixel size, μm	17×23
Number of outputs, pcs	24
Dimensions (with outputs), mm	40×26.5×4.85
Mass, g	100
Image standard format	4:3
Spectral response, nm	350-1100

Dark current, mV	2
Saturation voltage, V	0.6
Responsivity, mV/lx	60
Modulation transfer factor along the horizontal at 200 TVL, %	
in the center	85
at the corners	70
Modulation transfer factor along the vertical at 200 TVL, %	
in the center	70
at tne corners	45
Dark signal relative mean square nonuniformity, %	0.4
Output signal relative mean square nonuniformity, %	3.0
Dynamic range	2000
Mean dark signal to saturation voltage, %	0.2

## **SPECTRAL RESPONSE CHARACTERISTICS**



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