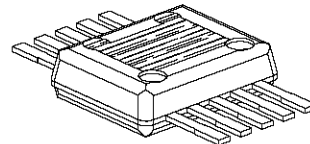


PHOTO DETECTOR FOR DIGITAL VIDEO DISK

ADVANCE DATA

- LARGE BANDWIDTH AND LOW NOISE I/U AMPLIFIER
- SENSITIVITY SWITCHING FOR OPTICAL PICKUPS
- DETECTOR PATTERN ADAPTED FOR EFM SIGNAL DETECTION, FOCUS AND TRACKING CONTROLS



OPTOSOP10L
(Plastic Transparent Package)

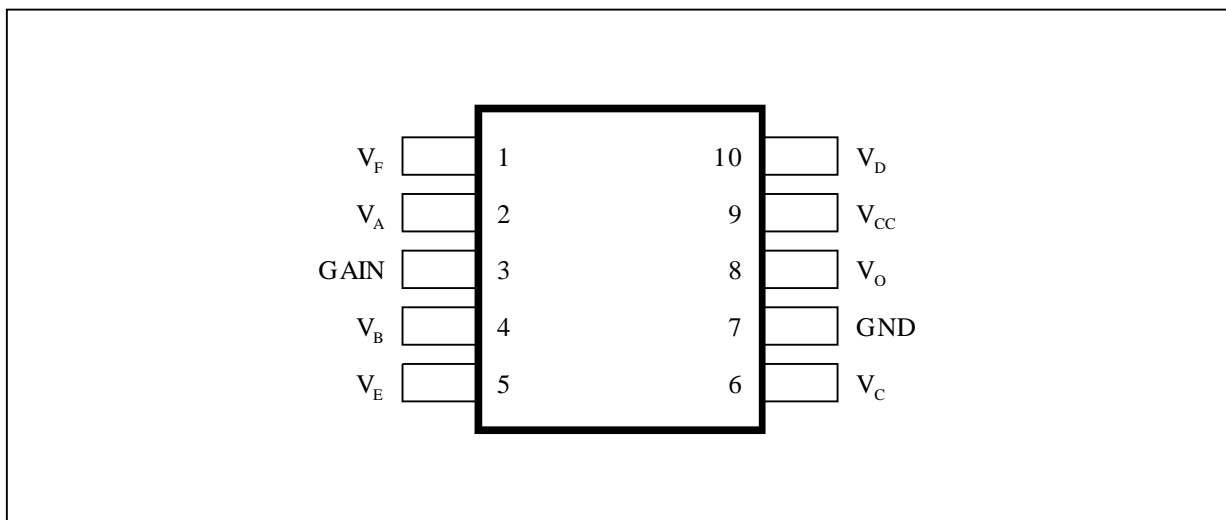
ORDER CODE : STV0705

DESCRIPTION

This six diodes photodetector includes six low noise I/V amplifiers with a sensitivity switching for adaptation to different optical pickups and disks.

The detector pattern is adaptable for astigmatism focus method, 3 beams tracking and differential phase detection methods.

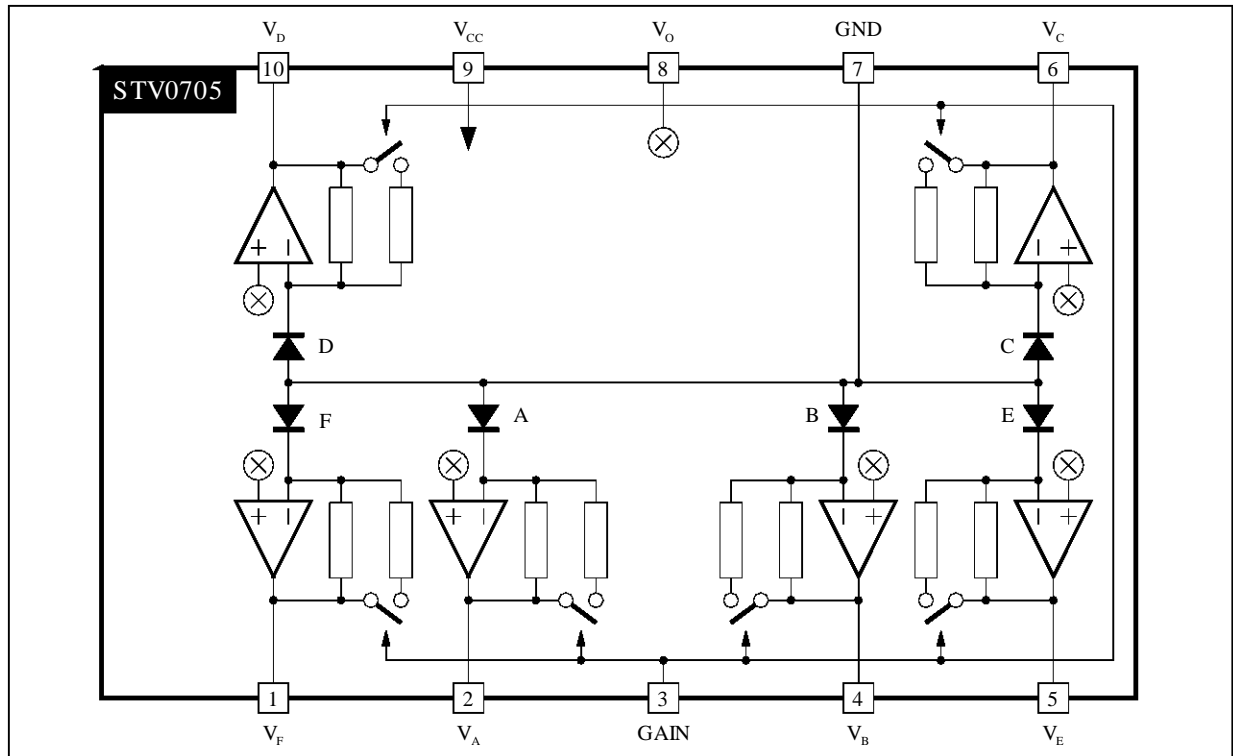
PIN CONNECTIONS



0705-01.EPS

STV0705

BLOCK DIAGRAM



0705-02.EPS

ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V _{CC}	Power Supply Voltage	6	V
T _j	Junction Temperature	150	°C
T _{oper}	Operating Temperature	- 20, +70	°C

0705-01.TBL

THERMAL DATA

Symbol	Parameter	Value	Unit
R _{th(j-a)}	Junction-ambient Thermal Resistance	Max. 100	°C/W

0705-02.TBL

RECOMMENDED OPERATING CHARACTERISTICS

Symbol	Parameter	Min.	Typ.	Max.	Unit
V _{CC}	Power Supply	4.75	5	5.25	V

0705-03.TBL

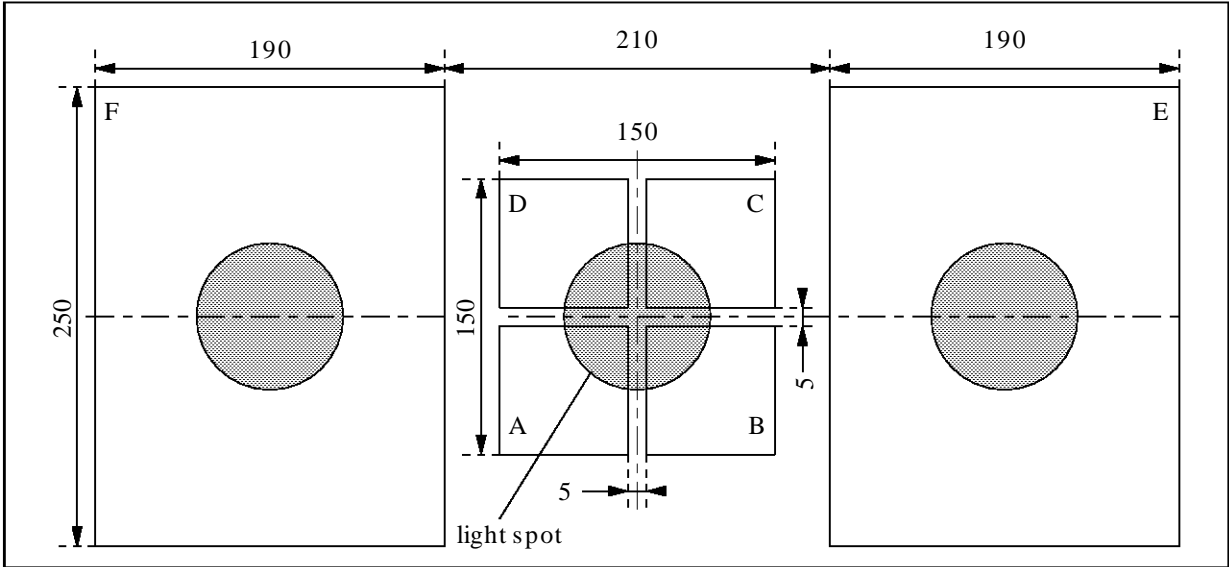
ELECTRICAL CHARACTERISTICS ($T_{amb} = 25^{\circ}C$, unless otherwise specified)

$V_{CC} = 5V$, Light wavelength = 635 to 680nm
 Light intensity (A, B, C, D) = 20 to 200 μW
 Light intensity (E, F) = 2 to 20 μW

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
SADH SADL	Sensitivity A to D	Gain = H Gain = L		36 12		mV/ μW mV/ μW
SEFH SEFL	Sensitivity E, F	Gain = H Gain = L		60 20		mV/ μW mV/ μW
BWAD	Attenuation 17MHz A to D	Gain = H	- 3			dB
BWEF	Attenuation 5MHz E, F	Gain = H	- 3			dB
DV	Offset Voltage A to F	$V_O = V_{CC}/2$	- 15	0	15	mV
ENAD	Equivalent Noise Level A to D	10MHz, BW = 30kHz		- 90		dB
ENEFL	Equivalent Noise Level E, F			- 90		dB

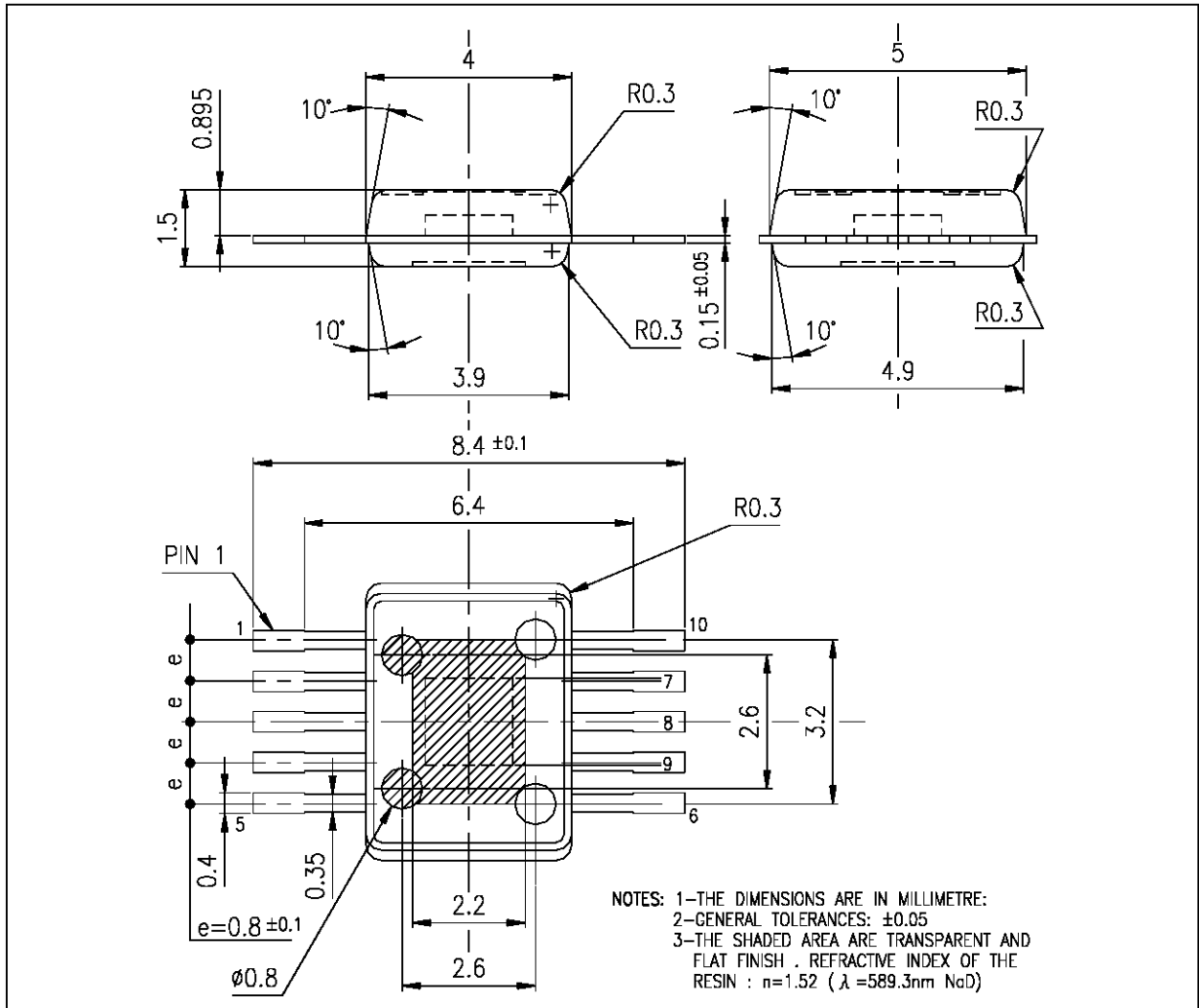
0705-04.TBL

DETECTOR PATTERN DIMENSIONS (Position : Center of Package) (Unit : μm)



0705-03.EPS

PACKAGE MECHANICAL DATA
 10 PINS - PLASTIC TRANSPARENT (OPTO)



PMOPT010.EPS

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