

JENCOLOUR® - RGB Colour Sensors

The Smallest Tri-Colour Sensors Of The World

PRODUCT INFORMATION



**Fast and compact colour recognition
based upon silicon photodiodes with
interference filters integrated on chip!**

For industrial colour applications with high dynamics the new compact colour sensors are a preferred choice. Three areas, each of different colour, are responsible for the recognition - similar to the human eye. Colour sensors based on Si-PIN-diodes and dielectric filters on-chip feature a small design, high-quality filters and the synchronous recording of all three-colour ranges.

Furthermore, the circular alignment of the diodes allows simple coupling of the measurement signal using an optical fibre. The sensors are offered as default in the TO5 package with translucent plastic or cover glass and/or in the SOP8 with translucent plastic. The colour sensors are made of 3 Si-PIN photo diodes integrated on chip.

Each of these photodiodes is sensitized with an interference spectral filter for its colour range, preferably for the primary colours red, green and blue. By direct mounting of the spectral filters onto the photodiodes, the sensor is a highly compact component.

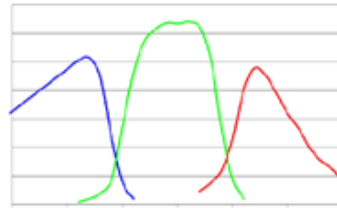
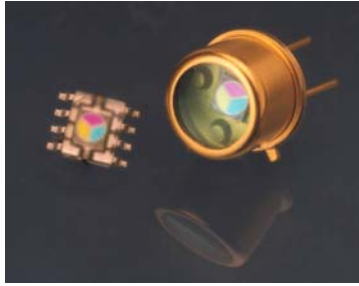
As a result, measuring systems based on this sensor can be sized considerably smaller than traditional colour measuring instruments. The 3-element colour sensors require only 3 measured values.

These are detected simultaneously for determining the colour. As a result, the three field sensors allow low-cost and fast signal processing. The Si-PIN photo diode design allows signal frequencies up to the MHz-range.

Highlights

- *Can be matched to customer requirements*
- *MHz signal frequency for taking measurements where time is critical*
- *Steep slope of filter curves*
- *Simple coupling of the measuring signal, e.g. with the help of a glass fibre by means of 3-element structure*
- *Colour and location information by means of integral structure*

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Product Overview JENCOLOUR®

<i>RGB Sensors</i>		
MCS3	RGB Sensors	Art. Nr:
MCS3AS	with transparent glob top in SOP8 package	V520P010310
MCS3AT	with transparent glob top in TO5 package	V520P010320
MCS3BT	with IR-cut and transparent glob top in TO5 package	V520P010321
MCS3AO	with IR-cut and optical lens in TO5 package	V520P010360
MCSiAT	with transparent glob top in TO5 package 19x3 to 3 groups PIN technology	V520P010420
MCSiBT	with IR-cut and transparent glob top in TO5 package 19x3 to 3 groups PIN technology	V520P010421
<i>Accessoires</i>		
MCS-EB1	Starter kit for all JENCOLOUR sensor-ICs incl. 4 x white light LED and RS232, power supply, serial cable and software	V522A100010
<i>Transimpedance amplifier</i>		
MTbx	Multi-channel preamplifier (current to voltage amp.)	
MTi04BD	delivery form die (PCM tested) sawed on foil	V520T012040
MTi04BS-BF	delivery form SOP16, lead-free	V520T012045
MTi04BQ-BF	delivery form QSOP16, lead-free	V520T012046
MTi04CS	NEW! delivery form SOP16, lead-free	E036A000110
MTi04CQ	NEW! delivery form QSOP16, lead-free	E036A000139

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or contact our sales offices!