

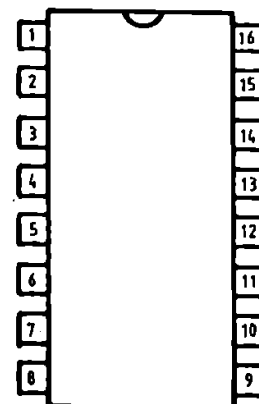
**TCA 650  
CHROMINANCE DEMODULATOR FOR PAL/SECAM DECODER**

The TCA 650 is an integrated synchronous demodulator for both PAL and SECAM chrominance signals. Switching of the standard is performed internally, controlled by an external applied DC signal. In addition to the synchronous demodulator, which delivers color difference signals, the circuit also incorporates : a PAL matrix, to obtain separately the ( R-Y ) and ( B-Y ) components of the chrominance signal, a PAL switch which reverses the phase of the ( R-Y ) component of the chrominance signal, a SECAM switch which performs the separation of DR and DB chrominance signals and the SECAM limiter.

**Features**

- Operating temperature .....	-25 ... +70	oC
- Supply voltage .....	max.	13.2 V
- Supply current .....	typ.	36 mA
- Gain from both inputs to pin 13 ( PAL ) .....	typ.	2.8 -
- Gain from both inputs to pin 15 ( PAL ) .....	typ.	3.1 -
- Gain difference from line to line ( PAL ) .....	max.	5 %
- Output signals DR, DB ( SECAM ) .....	1.6 ... 2.2	Vpp
- Color difference output signal ( R-Y ) .....	0.99 - 1.21	Vpp
- Color difference output signal ( B-Y ) .....	1.32 - 1.62	Vpp
- Square wave input signal .....	2.55 - 3.55	Vpp
- System switch input .....	PAL .....	min. 7 V
	SECAM .....	max. 1 V

- | 1. Chrominance input
- | 2. GND
- | 3. Chrominance input
- | 4. PAL/SECAM selector
- | 5. (R-Y) reference input (SECAM)
- | 6. (R-Y) reference input (PAL)
- | 7. (B-Y) reference input (PAL)
- | 8. (B-Y) reference input (SECAM)
- | 9. (B-Y), DB input
- | 10. Demodulated (B-Y) output
- | 11. (R-Y), DR input
- | 12. Demodulated (R-Y) output
- | 13. (R-Y), DR output
- | 14. V+
- | 15. (B-Y), DB output
- | 16. H/2 input (7.5 kHz)



PACKAGE MP-117 / TOP VIEW