

**ULX-2220A/TDA3950A CHROMA PROCESSOR  
FOR USE IN PAL COLOR TV RECEIVERS**

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**FEATURES**

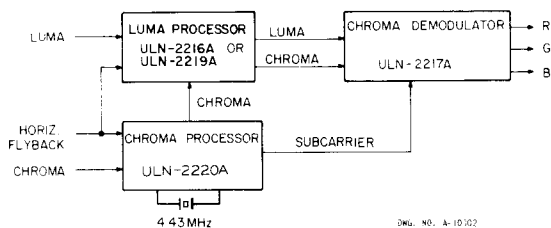
- Low External Parts Count
- 20 dB ACC Range
- $\pm 400$  Hz Pull-In Range
- Internal Voltage Regulator
- Fast Identification
- Single-Adjustment Tuning
- 14-Pin Dual In-Line Plastic Package

**ABSOLUTE MAXIMUM RATINGS**

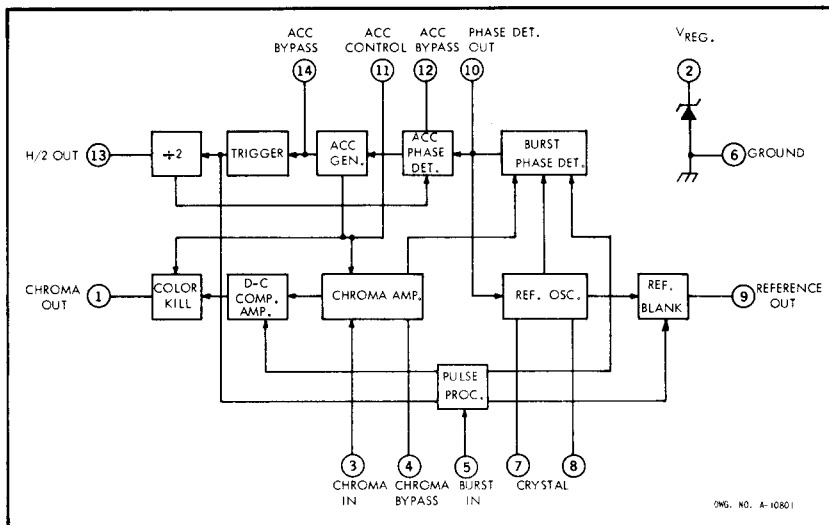
Regulator Current, $I_{REG}$ .....	60 mA
Chroma Input Voltage, $V_3$ .....	8.0 V <sub>pp</sub>
Reference Output Current, $I_g$ .....	10 mA
Operating Temperature Range, $T_A$ .....	-40°C to +85°C
Storage Temperature Range, $T_S$ .....	-65°C to +150°C

**SPECIFICALLY INTENDED** for use in color TV receivers utilizing the PAL system, the ULX-2220A/TDA3950A chroma processor is comprised of a crystal reference oscillator, an automatic phase control (APC) loop, an automatic chroma control (ACC) system, a color killer, and PAL identification.

Separate internal voltage regulators prevent coupling between the chroma, burst, and reference oscillator signals and provide consistent operation despite power line voltage fluctuations. Balanced phase detectors provide excellent performance in the presence of large amounts of noise.



**TYPICAL PAL COLOR SYSTEM**



**FUNCTIONAL BLOCK DIAGRAM**

The ULX prefix to the part number denotes an integrated circuit presently in development and undergoing engineering evaluation. If and when the device becomes a production item, the prefix will be changed to ULN. Sprague Electric assumes no obligation for future manufacture of any products presently in development unless such obligation is specifically undertaken in writing by authorized Sprague personnel.