

## E225x and E235x Series PAL Format Electronic Television Modulators

### FEATURES

- Power supply: 5 V
- Small Size: 44 mm × 44 mm × 17 mm
- Common Footprint
- Common Electrical Interface
- Standard pin-pitch between models
- I<sup>2</sup>C bus serial PLL control
- Same input connector locations between models
- Reduced component count
- High level of integration E2258T2 meets CENELEC emissions requirements

### DESCRIPTION

The E225x and E235x Series Modulators are new PAL format modulators with the output frequency set by a PLL.

These modulators provide direct Phase-Locked Loop tuning instead of the previous screwdriver setting, providing software flexibility over output channel control. The output may be tuned over the PAL channel range of 21 ~ 69.

These two new modulator series retain the common modulator mechanical footprint of previous designs. A variety of versions and options are available, as shown in the table.

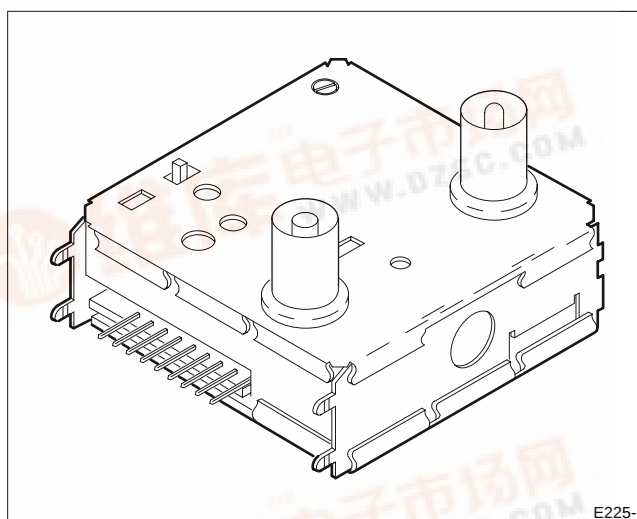
The PLL programming is provided by an I<sup>2</sup>C serial bus interface. Modulation factors of 100% and 55% are available.

Test and evaluation software is available upon request for programming the E225X and E235X modulator models.

### APPLICATIONS:

- Television/VCR
- Satellite receivers
- Multi-media adapters
- Video signal converters

### E2258T2 PACKAGAGE



E225-1

### PROGRAMMABLE OPTIONS

- Output frequency
- Test Signal Generator (TSG) On/Off
- Test Modes On/Off
- Inter-carrier spacing for output Mode – G/I/K (E2354T)
- Audio carrier level: -10 to -17 dB with respect to the Video carrier (E2354T)

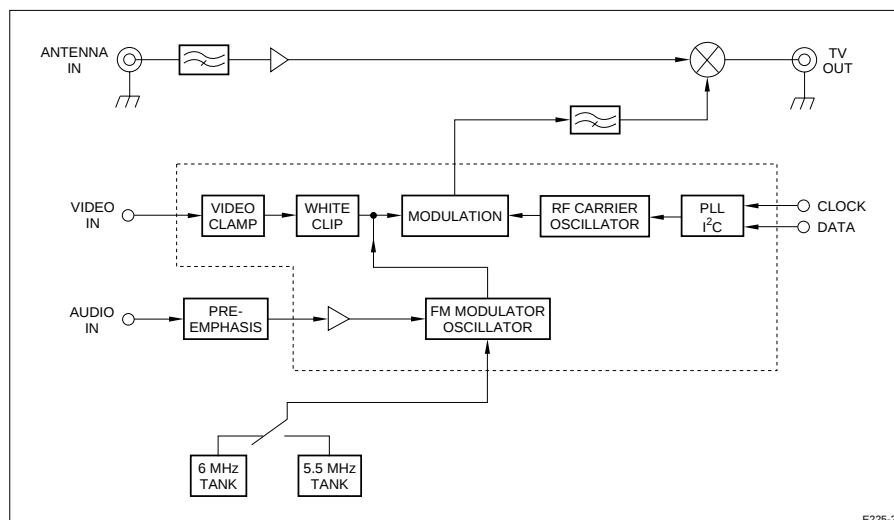
### SELECTION GUIDE

| MODEL   | PAL<br>FORMAT | MODULATION<br>FACTOR | PLL SETS                                                      |
|---------|---------------|----------------------|---------------------------------------------------------------|
| E2251T  | G             | 100%                 | Channel, TSG, RF On/Off                                       |
| E2251TA | G             | 55%                  | Channel, TSG, RF On/Off                                       |
| E2258TA | G/I           | 55%                  | Channel, TSG, RF On/Off                                       |
| E2258T2 | G/I           | 55%                  | Channel, TSG, RF On/Off                                       |
| E2354T  | G/I/K         | 100%                 | Channel, TSG, Format, Power<br>Save On/Off, Video/Audio Ratio |
| E2358T  | G/I           | 100%                 | Channel, TSG, RF On/Off                                       |

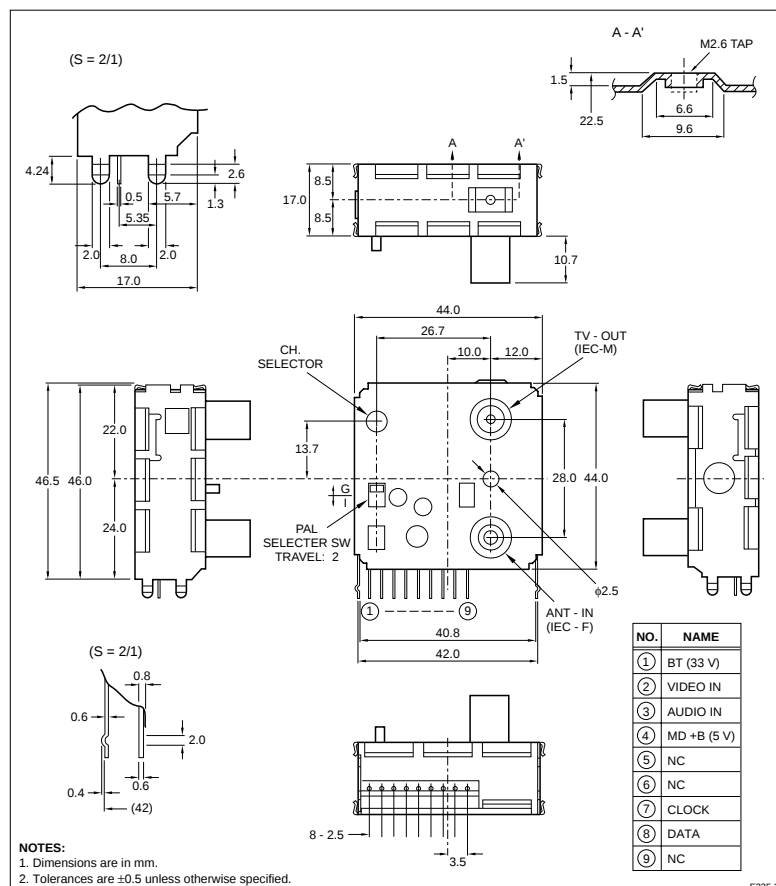
# PRODUCT INFORMATION

# SHARP

## BASIC BLOCK DIAGRAM



## MECHANICAL DIMENSIONS



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URL <http://www.marshall.com>

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#### Sterling Electronics Corp.

Houston, TX  
Ph (800) 745-5500  
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