

"Smart" LED Displays with On-Board Drivers

Four families of integrated displays provide smart solutions to your display requirements. Why design with discrete components when you can save time, effort, and board space with a standard integrated display from Three-Five Systems? All of these displays combine LED and silicon chip-on-board manufacturing techniques to provide compact, functional display subsystems. They are available off-the-shelf from Three-Five or our worldwide network of distributors at cost-effective prices.

Benefits of Integrated Displays

- Complete Display Subsystem—Chip-on-Board Driver IC
- Saves Design, Assembly, Test and Inventory Costs
- Reduced Development Time—Faster Time to Market
- Saves Front Panel Space by Up to 50%
- Simple Data Input Reduces Interconnection

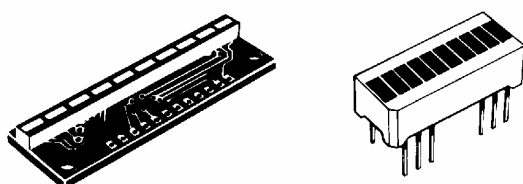
Digital Input Displays

- Microprocessor Compatible
- Simple Bit Mapped Software
- Frees Microprocessor Time

Analog Input Displays

- Replaces Moving Needle Meters
- Programmable Voltage Range
- On-board Voltage Reference

LED Bargraph Voltmeters with On-board Analog Drivers—TSM39XXX Series



Features

- End stackable for cascaded arrays
- Chip-on-board analog driver
- Linear, logarithmic & VU functions
- Selectable Bar or Dot Mode
- Variety of LED Colors/Sequences

Applications

- Stereo power meter
- Ham & CB S meter
- VU meter in tape recorders
- Process control meters
- Graphic Equalizers

Part Number Format TSM 39 2 4 1

FORMAT/PACKAGE

- 1 = 2" x 0.85" Horizontal
- 2 = 2" x 0.40" Horizontal (New Design)
- 3 = 1" x 0.40" Vertical

DRIVER TYPE

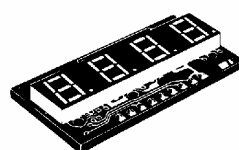
- 4 = Linear Function
- 5 = Logarithmic Function*
- 6 = VU Function

COLOR

- None = Standard Red
- 1 = High Efficiency Red
- 2 = Green
- 3 = Yellow
- 6 = 6 Green, 4 Red*
- 7 = 8 Green, 2 Red*
- 8 = 6 Green, 2 Yel, 2 Red*

*Available as standard in TSM3914X series only. Customized color arrays are available

Numeric LED Displays with On-board Serial Drivers—TSM5000/6000 Series



New Design—TSM6X55 Series—Four 0.5" digits on a 2.0" x 1.0" PCB

Features

- Two and four digit configurations
- 0.3" and 0.5" digit sizes
- Low current AlGaAs Versions
- High efficiency red, green, and standard red LED colors
- Resistor-adjusted brightness control

Applications

- Microprocessor Controlled Displays
- Industrial Controllers
- Medical Equipment
- Scales
- Instrumentation

Part Number Format TSM 5* 0 3 2 P

COLOR

- 0 = Standard Red
- 2 = Green
- 6 = AlGaAs Red
- 7 = High Efficiency Red

DIGIT SIZE

- 3 = 0.3"
- 5 = 0.5"

PINS

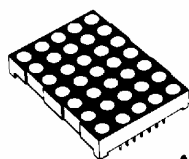
- P = With Pins

NUMBER OF DIGITS

- 2 = Two
- 4 = Four
- 5 = Four Digits + Colon

*TSM5XXX and TSM6XXX have different PCB sizes—consult data book

Smart LED Light Block with Integral Driver—TFIB5X57 Series



Features

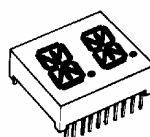
- 2.0" LED 5 x 7 Dot Matrix
- Simple Interface to Large Area Signs
- No Row or Column Drivers Required
- Single Serial Bus Communicates with Multiple "Smart Light Block" units.
- Low Processor Overhead

Applications

- Scrolling Signs
- Elevators
- Time/Date/Temp. Signs
- Large Area Instrumentation

Part Number	Color
TFIB5257	Green
TFIB5357	Yellow
TFIB5657	AlGaAs Red
TFIB5757	High Efficiency Red
TFIB56257	Dual Color AlGaAs Red/Green

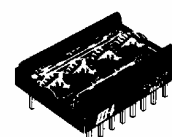
Alphanumeric LED Displays with On-board Drivers



TSM7X52



TSM1416



DL2416/TSM2416

TSM7X52 Series Features

- Two 0.54" Characters
- End Stackable
- Serial Data Input
- Direct Current Drive
- Low Current AlGaAs Version

DL1414, 1416, 2416 Series Features

- Compact, 16-Segment A/N Displays
- End Stackable
- Microprocessor Bus Compatible
- 64 Character ASCII Format
- Memory, decoder, multiplex drive