

CUSTOMER : \_\_\_\_\_

NO. : MKM-

EDIT :

DATE :

## SPECIFICATION FOR APPROVAL

PRODUCT : 0.56" Four-Digit 7-Segment Numeric Display

MODEL NO. MD-640/647

APPROVAL			REVISION
CHK	CHK	APPD.	
REMARKS			



**MIKWANG ELECTRONICS CO., LTD.**

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# MI KWANG ELECTRONICS

# MD-640/647

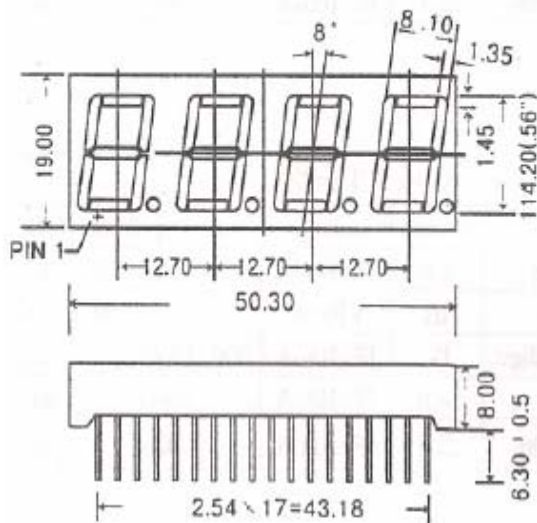
## 0.56 Inch Four-Digit 7-Segment Numeric Display

### GENERAL DESCRIPTION

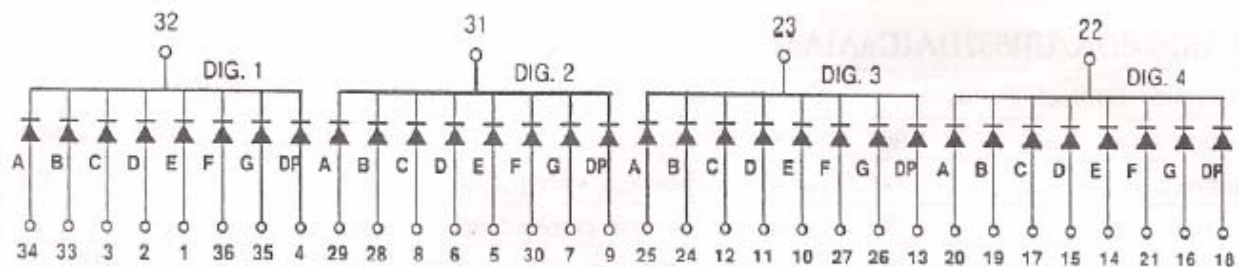
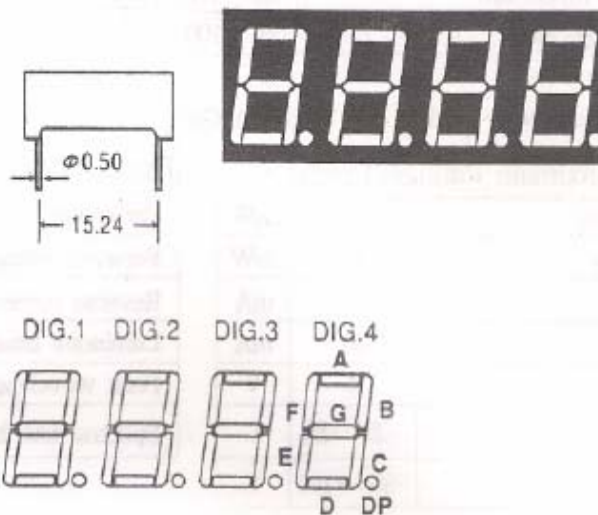
The MD-640 and MD-647 series are high performance epoxy resin molded 4-digit 7-segment LED displays for an application which space is at a premium.

The character height is approximately 0.56-inch(14.1mm) and available in red, green, orange and yellow-green emitting colors. The standard unit is constructed with black face and milky white segment color.

### PACKAGE DIMENSIONS



### ACTUAL SIZE



Cathode Common(MD-640)

Anode Common(MD-647) All diodes are reversed polarity

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## ◆ Super Red MD-SR640/SR647 (AlGaAs/GaAs)

### Absolute Maximum Ratings (Ta=25°C)

Power dissipation/total	1280	mW
Power dissipation/seg	40	mW
Forward current	20	mA
Peak forward current	60	mA
Reverse voltage	5	V
Operating temperature	-25~+85	°C
Storage temperature	-55~+100	°C

### Electrical/Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Forward voltage/seg	V <sub>f</sub>	I <sub>f</sub> =10mA	-	1.8	2.0	V
Reverse current/seg	I <sub>r</sub>	V <sub>r</sub> =5V	-	-	10	μA
Luminous intensity/digit	I <sub>v</sub>	I <sub>f</sub> =10mA	600	1300	-	μcd
Peak wave length	λ <sub>p</sub>	I <sub>f</sub> =10mA	-	660	-	nm
Spectral line half width	Δλ	I <sub>f</sub> =10mA	-	20	-	nm

## ◆ Green MD-UG640/UG647 (GaP)

### Absolute Maximum Ratings (Ta=25°C)

Power dissipation/total	1536	mW
Power dissipation/seg	48	mW
Forward current	20	mA
Peak forward current	60	mA
Reverse voltage	5	V
Operating temperature	-25~+85	°C
Storage temperature	-55~+100	°C

### Electrical/Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Forward voltage/seg	V <sub>f</sub>	I <sub>f</sub> =10mA	-	2.2	2.4	V
Reverse current/seg	I <sub>r</sub>	V <sub>r</sub> =5V	-	-	10	μA
Luminous intensity/digit	I <sub>v</sub>	I <sub>f</sub> =10mA	600	1300	-	μcd
Peak wave length	λ <sub>p</sub>	I <sub>f</sub> =10mA	-	570	-	nm
Spectral line half width	Δλ	I <sub>f</sub> =10mA	-	30	-	nm

- ◆ Pulse Width - 1ms
- Duty Cycle - 1/5