

CUSTOMER : _____

NO. : MKM-

EDIT :

DATE :

SPECIFICATION FOR APPROVAL

PRODUCT : 2.3" Single Digit 7-Segment Numeric Display

MODEL NO. MD-2310/2317

APPROVAL			REVISION
CHK	CHK	APPD.	
REMARKS			



MIKWANG ELECTRONICS CO., LTD.

RM1401, 60-24, GASAN-DONG, GEUMCHEON-GU, SEOUL, KOREA

TEL : 82-2-2113-7700(Rep.) FAX : 82-2-2113-7707

URL : WWW.LED.CO.KR / E-MAIL : mkled7700@hanmail.net

MI KWANG ELECTRONICS MD-2310/2317

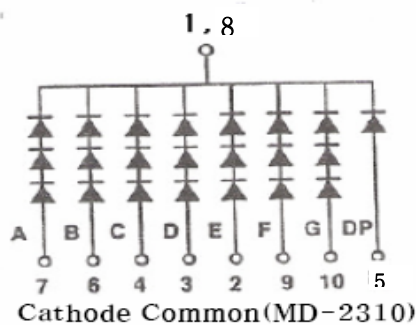
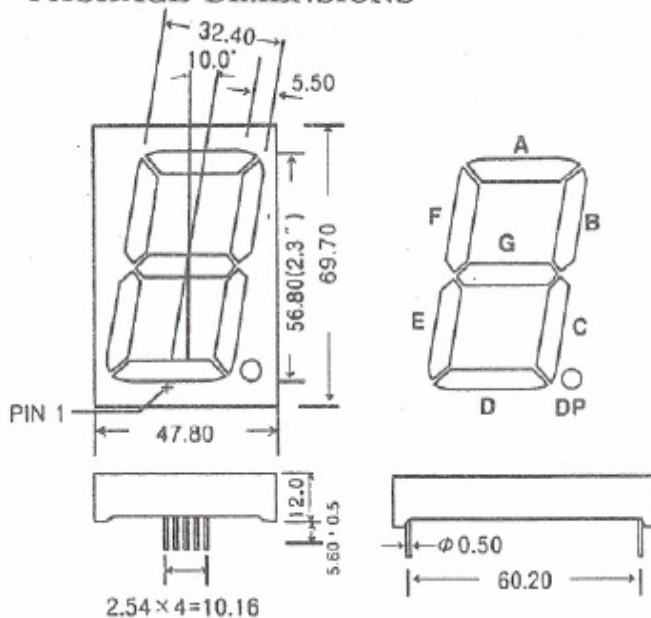
2.3 Inch Single-Digit 7-Segment Numeric Display

GENERAL DESCRIPTION

The MD-2310 and MD-2317 series are high performance epoxy resin molded 1-digit 7-segment LED displays for an application which space is at a premium.

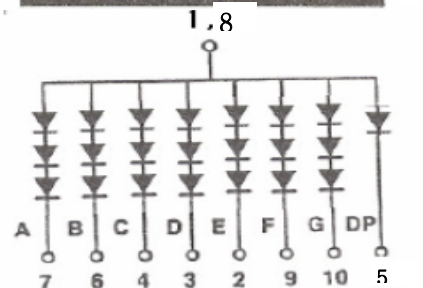
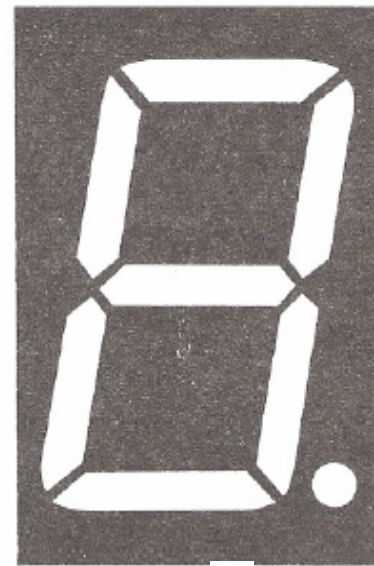
The character height is approximately 2.3-inch(56.9mm) and available in red, green, orange and yellow-green emitting colors. The standard unit is constructed with black face and milky white segment color.

PACKAGE DIMENSIONS



Cathode Common(MD-2310)

ACTUAL SIZE



Anode Common(MD-2317)

MIKWANG ELECTRONICS CO., LTD.

Rm1401, World Meridian Venture Center, #60-24, Gasan-dong, Geumcheon-gu, Seoul, Korea
TEL +82-2-2113-7700/ FAX +82-2-2113-7707 www.LED.co.kr

◆ Ultra Red MD-UR2310/2310(AlGaAs/GaAs)

Absolute Maximum Ratings(Ta=25℃)

Power dissipation/total	880	mW
Power dissipation/seg	120	mW
Forward current	20	mA
Peak forward current	60	mA
Reverse voltage	15	V
Operating temperature	-25~+85	℃
Storage temperature	-55~+100	℃

Electrical/Optical Characteristics(Ta=25℃)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Forward voltage/seg	V _f	If=10mA	-	5.4	6	V
Reverse current/seg	I _r	V _r =15V	-	-	10	μA
Luminous intensity/digit	I _v	If=10mA	800	2500	-	μcd
Peak wave length	λ _p	If=10mA	-	660	-	nm
Spectral line half width	Δλ	If=10mA	-	20	-	nm

* V_f of Dot (Typ : 1.8V, Max 6V)

◆ Ultra Green MD-UG2310/2317(AlGaInP/GaP)

Absolute Maximum Ratings(Ta=25℃)

Power dissipation/total	1048	mW
Power dissipation/seg	144	mW
Forward current	20	mA
Peak forward current	60	mA
Reverse voltage	15	V
Operating temperature	-25~+85	℃
Storage temperature	-55~+100	℃

Electrical/Optical Characteristics(Ta=25℃)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Forward voltage/seg	V _f	If=10mA	-	6	7.2	V
Reverse current/seg	I _r	V _r =15V	-	-	10	μA
Luminous intensity/digit	I _v	If=10mA	700	1500	-	μcd
Peak wave length	λ _p	If=10mA	569	570	575	nm
Spectral line half width	Δλ	If=10mA	-	30	-	nm

* V_f of Dot (Typ : 2V, Max 2.4V)

◆ Super Red MD-SR2310/2310(AlGaAs/GaAs)

Absolute Maximum Ratings(Ta=25℃)

Power dissipation/total	880	mW
Power dissipation/seg	120	mW
Forward current	20	mA
Peak forward current	60	mA
Reverse voltage	15	V
Operating temperature	-25~+85	℃
Storage temperature	-55~+100	℃

Electrical/Optical Characteristics(Ta=25℃)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Forward voltage/seg	V _f	If=10mA	-	5.4	6	V
Reverse current/seg	I _r	V _r =15V	-	-	10	μA
Luminous intensity/digit	I _v	If=10mA	800	1500	-	μcd
Peak wave length	λ _p	If=10mA	-	660	-	nm
Spectral line half width	Δλ	If=10mA	-	20	-	nm

* V_f of Dot (Typ : 1.8V, Max 6V)

◆ Green MD-G2310/2317(GaP)

Absolute Maximum Ratings(Ta=25℃)

Power dissipation/total	1048	mW
Power dissipation/seg	144	mW
Forward current	20	mA
Peak forward current	60	mA
Reverse voltage	15	V
Operating temperature	-25~+85	℃
Storage temperature	-55~+100	℃

Electrical/Optical Characteristics(Ta=25℃)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Forward voltage/seg	V _f	If=10mA	-	6	7.2	V
Reverse current/seg	I _r	V _r =15V	-	-	10	μA
Luminous intensity/digit	I _v	If=10mA	-	1300	-	μcd
Peak wave length	λ _p	If=10mA	-	570	573	nm
Spectral line half width	Δλ	If=10mA	-	30	-	nm

* V_f of Dot (Typ : 2V, Max 2.4V)

◆ Pulse Width - 1ms

Duty Cycle - 1/5