EVERLIGHT

LED DIGIT DISPLAYS

T-41-33

Display Size	Type No. and Remark (*)	New Model No.	Chip: Material	Chip: Emitted Color	C.C. or C.A.	Peak Wave Length λp (nm)	Absolute Maximum Ratings: Δλ (nm)	Po (mW)	IF (mA)	Peak IF (mA)	Electro-Optical Characteristics: VF (V) Min.	VF (V) Typ.	VF (V) Max.	Rec. IF (mA)	IV (ucd) Min.	IV (ucd) Typ.	Package Fig.
0.3 inch Single Digit	S301RWB *	~~ELS-313AR~~	GaAsP	Red	CC Common NR Cathode	655	40	110	~~40~~	200	1.5	1.7	2.0	10~20	200	450	
	S301HWB *	~~ELS-313AR~~	GaP	Bright Red		697	90	45	~~15~~	50	1.7	2.1	2.8	5~10	300	600	
	S301IDR *	~~ELS-313AHR~~	GaAsP/GaP	Hi-Eff. Red		635	45	100	30	160	1.7	2.0	2.8	10~20	750	1800	
	S301GWA *	~~ELS-313AG~~	GaP	Green		565	30	100	30	160	1.7	2.1	2.8	10~20	750	1800	
	S301YWB *	~~ELS-313AY~~	GaAsP GaP	Yellow		585	35	85	~~20~~	160	1.7	2.0	2.8	10~20	600	1300	
	S301EDE *	~~ELS-313AE~~	GaAsP GaP	Orange		635	45	100	30	160	1.7	2.0	2.8	10~20	750	1800	
	S322RDB *	~~ELS-312AR~~	GaAsP	Red	CA Common NB Anode	655	40	110	~~40~~	200	1.5	1.7	2.0	10~20	200	450	1
	S322HWB *	~~ELS-312AP~~	GaP	Bright Red		697	90	45	~~15~~	50	1.7	2.1	2.8	5~10	300	600	
	S322IDR *	~~ELS-312AHR~~	GaAsP GaP	Hi-Eff. Red		635	45	100	~~60~~	160	1.7	2.0	2.8	10~20	750	1800	
	S322GWA *	~~ELS-312AG~~	GaP	Green		565	30	100	~~30~~	160	1.7	2.1	2.8	10~20	750	1800	
	S322YWB	~~ELS-312AY~~	GaAsP GaP	Yellow		585	35	85	~~20~~	160	1.7	2.0	2.8	10~20	600	1300	
	S322EDE	~~ELS-312AE~~	GaAsP GaP	Orange		635	45	100	~~30~~	160	1.7	2.0	2.8	10~20	750	1800	
0.3 inch 1-1/2 Digit Polarity & Overflow	S304RWB *	~~ELS-311AR~~	GaAsP	Red	PRV OVR	655	40	110	~~40~~	200	1.5	1.7	2.0	10~20	200	450	2
	S304HWB *	~~ELS-311AP~~	GaP	Bright Red		697	90	45	~~15~~	50	1.7	2.1	2.8	5~10	300	600	
	S304IDR *	~~ELS-311AHR~~	GaAsP/GaP	Hi-Eff. Red		635	45	100	~~50~~	160	1.7	2.0	2.8	10~20	750	1800	
	S304GWA *	~~ELS-311AG~~	GaP	Green		565	30	100	~~60~~	160	1.7	2.1	2.8	10~20	750	1800	
	S304YWB *	~~ELS-311AY~~	GaAsP/GaP	Yellow		585	35	85	~~20~~	160	1.7	2.0	2.8	10~20	600	1300	
	S304EDE	~~ELS-311AE~~	GaAsP/GaP	Orange		635	45	100	~~30~~	160	1.7	2.0	2.8	10~20	750	1800	
0.36 inch Single Digit	S315RDB *	~~ELS-307R~~	GaAsP	Red	CC Common NR Cathode	655	40	110	~~40~~	200	1.5	1.7	2.0	10~20	200	450	3
	S315HWB *	~~ELS-307P~~	GaP	Bright Red		697	90	45	~~15~~	50	1.7	2.1	2.8	5~10	300	600	
	S315IDR *	~~ELS-307HR~~	GaAsP/GaP	Hi-Eff. Red		635	45	100	~~30~~	160	1.7	2.0	2.8	10~20	750	1800	
	S315GWA *	~~ELS-307G~~	GaP	Green		565	30	100	~~30~~	160	1.7	2.1	2.8	10~20	750	1800	
	S315YWB	~~ELS-307Y~~	GaAsP/GaP	Yellow		585	35	85	~~20~~	160	1.7	2.0	2.8	10~20	600	1300	
	S315EDE	~~ELS-307E~~	GaAsP/GaP	Orange		635	45	100	~~60~~	160	1.7	2.0	2.8	10~20	750	1800	
	S316RDB *	~~ELS-306R~~	GaAsP	Red	CA Common NR Anode	655	40	110	~~40~~	200	1.5	1.7	2.0	10~20	200	450	
	S316HWB *	~~ELS-306P~~	GaP	Bright Red		697	90	45	~~15~~	50	1.7	2.1	2.8	5~10	300	600	
	S316IDR *	~~ELS-306HR~~	GaAsP/GaP	Hi-Eff. Red		635	45	100	~~60~~	160	1.7	2.0	2.8	10~20	750	1800	
	S316GWA *	~~ELS-306G~~	GaP	Green		565	30	100	~~30~~	160	1.7	2.1	2.8	10~20	750	1800	
	S316YWB	~~ELS-306Y~~	GaAsP/GaP	Yellow		585	35	85	~~20~~	160	1.7	2.0	2.8	10~20	600	1300	
	S316EDE	~~ELS-306E~~	GaAsP/GaP	Orange		635	45	100	~~30~~	160	1.7	2.0	2.8	10~20	750	1800	
0.3 inch Single Digit	S321RDB *	~~ELS-315AR~~	GaAsP	Red	CC Common NR Cathode	655	40	110	~~40~~	200	1.5	1.7	2.0	10~20	200	450	4
	S321HWB	~~ELS-315AP~~	GaP	Bright Red		697	90	45	~~15~~	50	1.7	2.1	2.8	5~10	300	600	
	S321IDR	~~ELS-315AHR~~	GaAsP/GaP	Hi-Eff. Red		635	45	100	~~30~~	160	1.7	2.0	2.8	10~20	750	1800	
	S321GWA	~~ELS-315AG~~	GaP	Green		565	30	100	~~30~~	160	1.7	2.1	2.8	10~20	750	1800	
	S321YWB	~~ELS-315AY~~	GaAsP/GaP	Yellow		585	35	85	~~20~~	160	1.7	2.0	2.8	10~20	600	1300	
	S321EDE	~~ELS-315AE~~	GaAsP/GaP	Orange		635	45	100	~~30~~	160	1.7	2.0	2.8	10~20	750	1800	
	~~S302RWB~~ *	—	GaAsP	Red	CA Common NR Anode	655	40	110	~~40~~	200	1.5	1.7	2.0	10~20	200	450	
	~~S302HWB~~ *	—	GaP	Bright Red		697	90	45	~~15~~	50	1.7	2.1	2.8	5~10	300	600	
	~~S302IDR~~ *	—	GaAsP/GaP	Hi-Eff. Red		635	45	100	~~30~~	160	1.7	2.0	2.8	10~20	750	1800	
	~~S302GWA~~ *	—	GaP	Green		565	30	100	~~30~~	160	1.7	2.1	2.8	10~20	750	1800	
	~~S302YWB~~ *	—	GaAsP/GaP	Yellow		585	35	85	~~20~~	160	1.7	2.0	2.8	10~20	600	1300	
	~~S302EDE~~ *	—	GaAsP/GaP	Orange		635	45	100	~~30~~	160	1.7	2.0	2.8	10~20	750	1800	
0.4 inch Single Digit	S401RDB *	~~ELS-4140AR~~	GaAsP	Red	CC Common NR Cathode	655	40	110	~~40~~	200	1.5	1.7	2.0	10~20	200	480	5
	S401HWB *	~~ELS-4140AP~~	GaP	Bright Red		697	90	45	~~15~~	50	1.7	2.1	2.8	5~10	300	700	
	S401IDR *	~~ELS-4140AHR~~	GaAsP/GaP	Hi-Eff. Red		635	45	100	30	160	1.7	2.0	2.8	10~20	800	2000	
	S401GWA *	~~ELS-4140AG~~	GaP	Green		565	30	100	~~30~~	160	1.7	2.1	2.8	10~20	800	2000	
	S401YWB *	~~ELS-4140AY~~	GaAsP GaP	Yellow		585	35	85	~~20~~	160	1.7	2.0	2.8	10~20	650	1500	
	S401EDE *	~~ELS-4140AE~~	GaAsP GaP	Orange		635	45	100	~~30~~	160	1.7	2.0	2.8	10~20	800	2000	
	S402RDB *	~~ELS-4740AR~~	GaAsP	Red	CA Common NR Anode	655	40	110	~~40~~	200	1.5	1.7	2.0	10~20	200	480	
	S402HWB *	~~ELS-4710AP~~	GaP	Bright Red		697	90	45	~~15~~	50	1.7	2.1	2.8	5~10	300	700	
	S402IDR *	~~ELS-4710AHR~~	GaAsP GaP	Hi-Eff. Red		635	45	100	~~30~~	160	1.7	2.0	2.8	10~20	800	2000	
	S402GWA *	~~ELS-4710AG~~	GaP	Green		565	30	100	~~30~~	160	1.7	2.1	2.8	10~20	800	2000	
	S402YWB *	~~ELS-4710AY~~	GaAsP GaP	Yellow		585	35	85	~~20~~	160	1.7	2.0	2.8	10~20	650	1500	
	S402EDE *	~~ELS-4710AE~~	GaAsP GaP	Orange		635	45	100	~~30~~	160	1.7	2.0	2.8	10~20	800	2000	

LED DIGIT DISPLAYS

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T-41-33

TEST CONDITION FOR EACH PARAMETER:

Parameter:	Symbol	Unit	Test Condition
Reverse Voltage	V_R	VOLT	
Reverse Current	I_R	μA	V_R=5.0 Volt
Forward Voltage	V_F	VOLT	I_F=20mA
Luminous Intensity	I_V	μCD	I_F=10mA
Luminous Intensity Matching Ratio	I_V-m		I_F=20mA
Spectral Line Half-Width	Δλ	nm	
Power Dissipation	P_D	mW	
Peak Forward Current (Duty 1/10 1KHz)	I_F (Peak)	mA	
Recommanded Operating Current	I_F (Rec)	mA	

ABSOLUTE MAXIMUM RATINGS: (Ta=25°C)

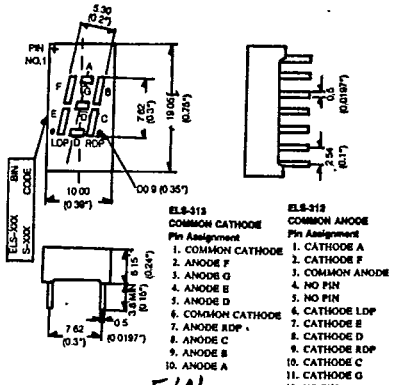
Reverse Voltage :	5 Volt
Reverse Current (V_R=5V) :	10μA
Operating Temperature Range:	-40°C To 85°C
Storage Temperature Range :	-40°C To 100°C
Lead Soldering Temperature : (1.6mm (1/16 inch) From Body)	260°C For 5 Seconds

REMARKS:

- IV-m=2:1
- ●●●The most popular Types ●Common Types The rest are special Types
- Hi-Eff. Red — High Efficiency Red

PACKAGE DIMENSIONS:

Fig-1

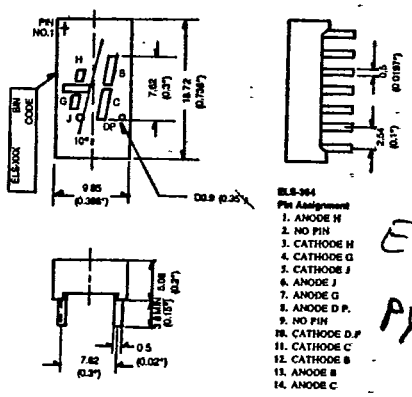


E101a

E141c

PY15

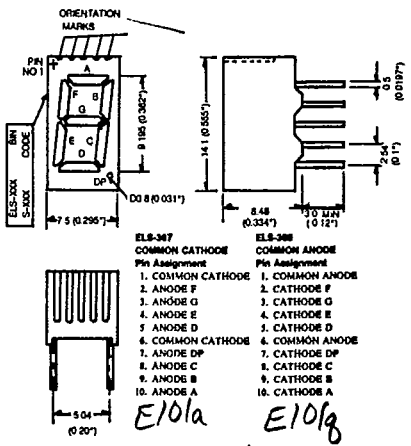
Fig-2



E141f

PY1339

Fig-3

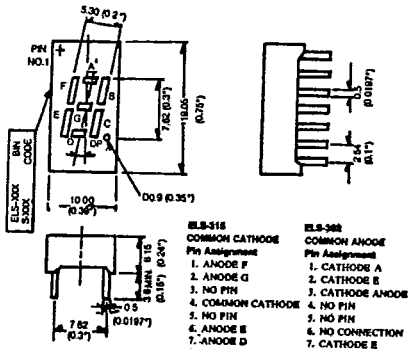


E101a

E101g

PY176e

Fig-4

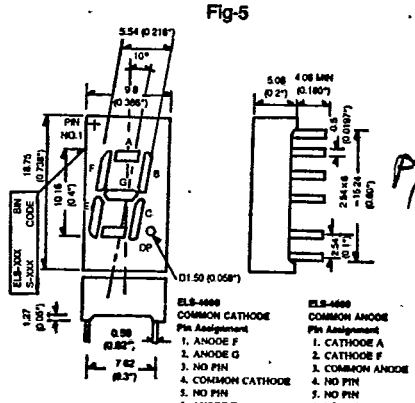


E141d

PY15

E141n

Fig-5



PY1344

E141d

E141n

NOTE:

1. The average luminous intensity is obtained by summing the luminous intensity of each segment and divided by the total number of segments. The displays are categorized for luminous intensity with the intensity category designed by a letter located on the side of the package.
2. Luminous intensity is measured with a light sensor and filter, combination that approximates the CIE (International Commission, on Illumination) eye-response curve.
3. Clean only in water, isopropanol, ethanel, Freon TF or TF (or equivalent)
4. All dimensions are in milimeters/inches. Tolerance= ±0.25mm/ ±0.1inch