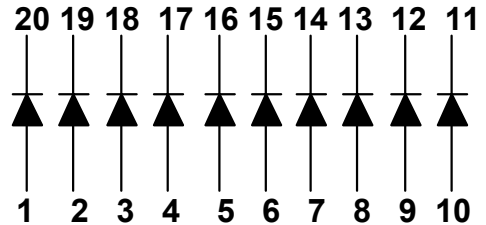
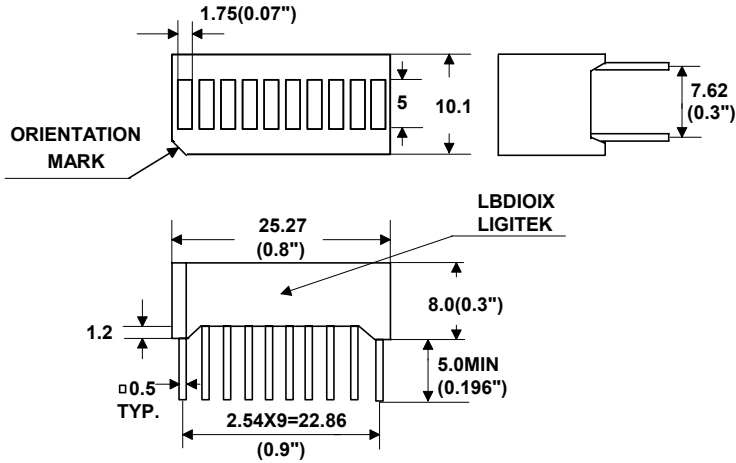


10 WAY LED BARGRAPH DISPLAY

LBD101X-XX series

Package dimensions

Internal circuit diagram



NOTE: All dimension are in millimeters and (inch) tolerance is $\pm 0.25(0.01)$ unless otherwise noted

• Connection to electrical schematic

Electrical connection

PIN NO.	LBD101X-XX	PIN NO.	
1	Anode	11	Cathode
2	Anode	12	Cathode
3	Anode	13	Cathode
4	Anode	14	Cathode
5	Anode	15	Cathode
6	Anode	16	Cathode
7	Anode	17	Cathode
8	Anode	18	Cathode
9	Anode	19	Cathode
10	Anode	20	Cathode

Colour coding

- B = Blue**
- I = Hi-Eff Red**
- G = Green**
- Y = Yellow**
- SE = Orange**

• Part selection and electro-optical characteristics (ratings @ Ta=25°C)

PART NO	CHIP		λ_P (nm)	$\Delta\lambda$ (nm)	Electrical					IV-M
	material	emitted			Vf(v)			Iv(mcd)		
					Min	Typ	Max	Min	Typ	
LBD1015-XX	GaAsP	Super Red	660	20	1.5	1.7	2.4	5.6	10	2:1
LBD1011-XX	GaP	Red	697	90	1.7	2.1	2.8	0.5	0.9	2:1
LBD1012-XX	GaP	Green	565	30	1.7	2.1	2.8	2.5	4	2:1
LBD1013-XX	GaAsP/GaP	Yellow	585	35	1.7	2	2.8	2.8	4.5	2:1
LBD1014-XX	GaAsP/GaP	Hi-Eff Red	635	45	1.7	2	2.8	2.8	4.5	2:1
LBD101SE-XX	GaAsP/GaP	Orange	610	45	1.7	2	2.8	2.8	4.5	2:1

• ABSOLUTE MAXIMUM RATING (TA=25°C)

PARAMETER	RED			GREEN	YELLOW			ORANGE		UNIT	REMARK
	SR	I	H	G		Y		SE	E		
FORWARD CURRENT PER CHIP	40	30	15	30		20		30	30	mA	
PEAK CURRENT PER CHIP (DUTY 1/10, 0.1MS PULSE WIDTH)	200	120	60	120		80		120	120	mA	
POWER DISSIPATION PER CHIP	110		45	100	85			100		mW	
DERATING LINEAR FROM 25°C PER CHIP	0.45		0.25	0.45	0.45			0.45		mA/°C	
REVERSE CURRENT PER CHIP	10			10	10			10		μA	
OPERATING TEMPERATURE	-25°C TO +85°C										
STORAGE TEMPERATURE	-25°C TO +85°C										

SOLDER TEMPERATURE 1/16 INCH BELOW SEATING PLANE FOR 3 SECONDS AT 260°C

• TEST CONDITION FOR EACH PARAMETER

PARAMETER	SYMBOL	UNIT	TEST CONDITION
FORWARD VOLTAGE PER CHIP	V_f	volt	I _f =20mA
LUMINOUS INTENSITY PER CHIP	I_v	mcd	I _f =10mA
PEAK EMISSION WAVELENGTH	λ_P	nm	I _f =20mA
SPECTRAL LINE HALF-WIDTH	$\Delta\lambda$	nm	I _f =20mA
REVERSE CURRENT ANY CHIP	I_r	mA	V _r =5V
LUMINOUS INTENSITY MATCHING RATIO	IV-M		