Product Specification

Table 3. ELECTRICAL CHARACTERISTICS (Continue)

Parameter		Symbol	Values			Unit	Note
			Min	Typ	Max		
Backlight Assembly :							
Forward Current (one array)	Anode	$I_{F (anode)}$		400		mAdc	±5%
	Cathode	$I_{F (cathode)}$		400		mAdc	2, 3
Forward Voltage(L1)		V_F	74.8	81.4	88	Vdc	4
Power Consumption		P_{BL}	-	32.6	35.2	W	5
Burst Dimming Duty		On duty	1		100	%	
Burst Dimming Frequency		1/T	95		182	Hz	7
LED Array : (APPENDIX-V)							
Life Time				30,000		Hrs	6

**Notes :** The design of the LED driver must have specifications for the LED array in LCD Assembly.
The electrical characteristics of LED driver are based on Constant Current driving type.
The performance of the LED in LCM, for example life time or brightness, is extremely influenced by the characteristics of the LED Driver. So, all the parameters of an LED driver should be carefully designed.
When you design or order the LED driver, please make sure unwanted lighting caused by the mismatch of the LED and the driver (no lighting, flicker, etc) has never been occurred. When you confirm it, the LCD–Assembly should be operated in the same condition as installed in your instrument.

1. Electrical characteristics are based on LED Array specification.
2. Specified values are defined for a Backlight Assembly. (IBL :10 LED array/LCM)
3. Each LED array has 1 anode terminal and 1 cathode terminal.
   The forward current (I_F) of the anode terminal is 400mA and it supplies 400mA into one string, respectively
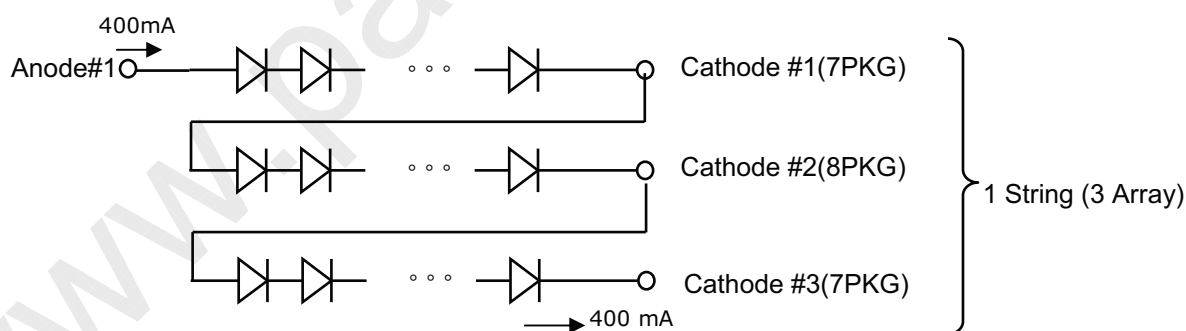
4. The forward voltage (V_F) of LED array depends on ambient temperature (Appendix)
5. Maximum level of power consumption is measured at initial turn on.
   Typical level of power consumption is measured after 1hrs aging at $25 \pm 2°C$.
6. The life time (MTTF) is determined as the time at which brightness of the LED is 50% compared to that of initial value at the typical LED current on condition of continuous operating at $25 \pm 2°C$, based on duty 100%.
7. The reference method of burst dimming duty ratio.
   It is recommended to use synchronous V-sync frequency to prevent waterfall
   (Vsync * 2 =Burst Frequency)