

3. Recommended Operating Conditions ^{1) 2) 3)}

Item	Symbol	Min.	Typ.	Max.	Unit	Remarks
Supply Voltage ⁴⁾	V_{DD}	3.0	3.3	3.6	V	
Receiver Input Range	-	0	-	2.4	V	
Differential Input High Threshold ⁵⁾	V_{TH}	-	-	$V_{OS}+0.1$	V	V_{OS} : Offset Mode Voltage $V_{OS}=1.2V$
Differential Input Low Threshold ⁵⁾	V_{TL}	$V_{OS}-0.1$	-	-	V	
FL Input Current ^{6) 7) 8)}	I_{FL}	2.5	5.0	6.0	mA(rms)	
FL Driving Voltage ⁸⁾	V_{FL}	540	590	640	V(rms)	$I_{FL}=5.0mA(rms)$ (Reference)
FL Driving Frequency ^{8) 9)}	f_{FL}	40	50	60	kHz	
FL Starting Voltage ^{8) 10)}	V_{SFL}	1200	-	1600	V(rms)	at 0 °C

Note 1) The module should be always operated within these ranges. The "Typ." shows the recommendable value.

Note 2) Recommended LVDS transmitter : DF90CF363MTD,DF90CF383MTD(made by National Semiconductor)

LVDS receiver included in this module is DF90CF364MTD.

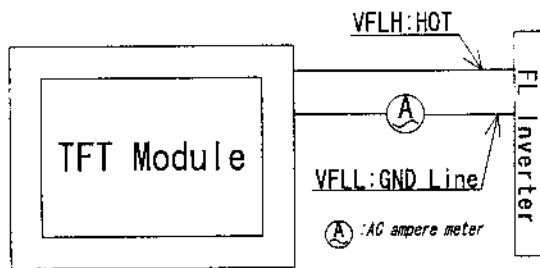
Refer to LVDS specifications.

Note 3) This TFT-LCD module conforms to LVDS standard TIA/EIA-644

Note 4) Checked Pin Terminal: V_{DD} , GND(0V)

Note 5) Checked Pin Terminal: IN0- ~ CLK+, GND(0V)

Note 6) Checked Pin Terminal: VFLH-VFLL



Note 7) If FL input current is higher than 6.0mA(rms), then FL lifetime becomes shorter.

Note 8) Measuring Method of I_{FL}

Note 9) Please adjust LCD operating signal timing and FL driving frequency, to optimize the display quality.

There is a possibility that flicker is observed by the interference of LCD operating signal timing and FL driving condition (especially driving frequency), even if the condition satisfies above recommended operating conditions and timing specifications shown in 2.4.4.

Note 10) Input FL starting voltage(V_{SFL}) should not be less than one second.

If it were less than one second, it may cause unstable operation of FL.