HM550FH101OE _Brief

55" Color TFT-LCD

FUNCTIONAL DRAFT SPECIFICATION

(This document is meant for customers' approval)

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1. General Specification

Item	Specification	Unit	Note
Active Screen Size	55	inch	
Active Area	1209.6 (H) * 680.4 (V)	mm	
Weight	2.6	kg	Typ.
Driving Scheme	a-Si TFT Active Matrix	-	
Number of Pixels	1920 * 1080	pixel	
Pixel Pitch (Sub Pixel)	0.21 * 0.63	mm	
Pixel Arrangement	RGB Vertical Stripe	-	
Display Colors	16.7 M	color	8bit
Display Mode	Transmissive Mode, Normally Black	-	
Glass Thickness (Array/CF)	0.5/0.5	mm	
Color Chromaticity	R = (0.641, 0.338) G = (0.298, 0.621) B = (0.152, 0.062) W = (0.274, 0.307)		
Contrast Ratio	4000:1(Typ.)		
Luminance	1000	cd/m^2	
View Angle (CR≥10)	+89/-89 (H), +89/-89 (V) (Typ.)		
Surface Treatment	Anti-glare, Haze 2%, Hard Coating (3H)		

2. Optical Specifications

The table below of optical characteristics

Item		Symbol	Condition	Min.	Typ.	Max.	Unit
Static Contrast Ratio		CR	$\theta_H = 0°$, $\theta_V = 0°$ Normal direction at center point	-	4000	-	-
Response Time		T_L		-	7.0	12	ms
Center Luminance of White		L_C		-	1000	-	cd/m^2
Crosstalk		CT-2D		-	-	4%	-
Color Chromaticity (CIE1931)	Red	R_X		Typ. - 0.03	0.641	Typ. + 0.03	-
		R_Y			0.338		-
	Green	G_X			0.298		-
		G_Y			0.621		-
	Blue	B_X			0.152		-
		B_Y			0.062		-
	White	W_X			0.274		-
		W_Y			0.307		-
	Color Gamut	CG		-	72	-	% NTSC
Viewing Angle	Horizontal	θ_{H+}	CR≥10	-	89	-	Deg.
		θ_{H-}		-	89	-	
	Vertical	θ_{V+}		-	89	-	
		θ_{V-}		-	89	-	

3. Reliability

Environment test condition

No.	Test Item	Condition
1	High temperature storage test	Ta= 70˚C 90% 240h
2	Low temperature storage test	Ta= -20˚C 240h
3	High temperature operation test	Ta= 60˚C 50%RH 500h
4	Low temperature operation test	Ta= -10˚C 500h
5	Humidity condition Operation	Ta= 40 ˚C, 90%RH