

Texas Instruments Qualification Summary

Qualification Summary for :	DLP3010AFQK (p3 720p S245 TRP)	
Report Date :	12/19/2019	

Test	Conditions	Required Minimum Sample Size (total # divided by three lots)	Results
A. Life Test: *			
High Temp Operating Life	95°C, 500hr or equivalent	40	Pass
Nominal Operating Life w/o Precondition	70°C, 670hr or equivalent	40	QBS
Preconditioning + Nominal Operating Life:			
(a) Precondition	UBH 110°C/85%RH, 500hr	40	QBS
(b) Nominal Operating Life	70°C, 670hr or equivalent		
Low Temp Operating Life	-10°C, 500hr or equivalent	40	Pass
Projector Life w/o Precondition	Ambient Temperature,	9	QBS
Projector Life w/o Precondition	1000hr or equivalent		QBS
Preconditioning + Projector Life			
(a) Precondition	UBH 110°C/85%RH, 500hr	9	QBS
(b) Projector Life	Ambient Temperature,	5	
	500hr or equivalent		
B. Environmental Tests: *			
High Temp Storage Life	125°C, 500hr or equivalent	30	QBS
Temperature Cycling	0°C/+100°C 1000cycles	77	Pass
Unbiased HAST	UBH 110°C/85%RH, 500hr	27	Pass
ESD	RT, HBM per Data Sheet	9	QBS
Latch Up	RT, +/-200mA	9	QBS
Mechanical Stress Sequence	, , ,		
(a) Electrical Test			
(b) Mechanical Shock	1500g, 0.5ms, 6axis, 5 pulses	32	QBS
(c) Vibration	20g, 20-2000Hz, All planes (x, y, z)		
(d) Acceleration	10Kg, Y1 plane only		
(e) Electrical Test			
Thermal Stress Sequence			
(a) Electrical Test			
(b) Thermal Shock	0°C/+100°C, 15 cycles	32	QBS
(c) Temp. Cycle	0°C/+100°C, 100 cycles		
(d) Moisture Resistance	10 days		
(a) Electrical Test			
C. Inspection Tests:			
Physical Dimensions		10	QBS
Internal Water Vapor		10	Pass
Window Pull		10	OBS
Bond Strength		9	QBS
D. Others:		20	0.00
Image Quality		30	QBS
Optical Performance		30	QBS

* Any conditions beyond the Recommended Operating Conditions listed in the Datasheet are run at accelerated test conditions.

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