

Document NO.	GlobTek Inc.	
TYPE : MTBF TEST CONDITION AC INPUT :100V DC OUTPUT :12V/1.25A REV : X01 ROOM TEMPERATURE : 25 °C		
TYPE		πp
RESISTOR		0.074528524
CAPACITOR		0.027418343
CAPACITOR(ALUMINUM)		1.479208404
DIODE		0.227006921
MOSFET		1.437889364
IC		0.141860939
CHOKE		0.090375193
TRANSFORMER		0.715705706
FUSE NTC		0.02
PCB		0.16
LED PHOTO		0.078697403
CONNECTOR		0.002486299
TOTAL πp		= 4.455177097
MTBF		= 224458 Hours

[illegible]

[illegible]

[illegible]

[illegible]

Document NO.	GlobTek Inc.											
TYPE : MOSFET TEST CONDITION AC INPUT : 100V DC OUTPUT :12 V/1.25A SPECIFICATION: ROOM TEMPERATURE : 25 °C												
P / N	Item	V	V _{op}	S	T	π _b	π _T	π _A	π _Q	π _E	π _P	
	Q1	600	358		79.7	0.012	2.72328	8	5.5	1	1.437889	DIP
Total π _P =		1.437889364										
V _m :Max Voltage						π _Q : Quality Factor						
T : Component Temperature						π _E : Environment Factor						
π _b : Base Failure Rate						π _p = AbPTPAPQPE Failures / 10 ⁶ Hours						
π _T : Temperature Facto												
=exp(-1925(((1/(T+273))-(1/298))))												
π _A : Application Factor												
												Amd.
												Page
												6

Document NO.		GlobTek Inc.											
TYPE : IC TEST CONDITION AC INPUT :100V DC OUTPUT :12V/1.25A SPECIFICATION: ROOM TEMPERATURE : 25 ⁰ C													
P / N	Item	Part type	pin	S	T	C ₁	C ₂	π T	π E	π Q	π L	π P	
	U1	OB2263	6		62.7	0.02	0.0030	1.716	2	2	1	0.081	
	IC1	AZ431BZ	3		57.8	0.02	0.0030	1.23	2	2	1	0.061	
Total π P=		0.141860939											
T : Component Temperature C1 : Die Complexity Failure Rates C2 : Package Failure Rate for all Microcircuits π T : Temperature Factor π E : Environment Factor π Q : Quality Factor π L : Learning Factor π p =(C1PT + C2PE)PLPQ Failures / 10⁶ Hours													
										Amd.		Page	7

Document NO.		GlobTek Inc.									
TYPE : Choke TEST CONDITION AC INPUT :100V DC OUTPUT :12V/1.25A SPECIFICATION: ROOM TEMPERATURE : 25 0C											
P / N	Item	Spec	P _m	S	T	π b	π c	π Q	π E	π P	
	L1				61.9	0.0005	1	20	4	0.0414	DIP
	NF				73.5	0.0006	1	20	4	0.049	DIP
Total π P =		0.090375193									
T : Component Temperature π b : Base Failure Rate (Ab = 0.000319exp(((T+273)/364)^8.7) π c : Construction Factor π Q : Quality Factor π E : Environment Factor π p : AbPCPOPE Failures / 10 ⁶ Hours											
								Amd.		Page	8

Document NO.		GlobTek Inc.								
TYPE : Transformer TEST CONDITION AC INPUT :100V DC OUTPUT :12V/1.25A SPECIFICATION: ROOM TEMPERATURE : 25 ⁰ C										
P / N	Item	Spec	π m	S	T	π b	π Q	π E	π P	
	T1				81.4	0.003976	30	6	0.7157057	DIP
Total π P=		0.715705706								
T : Component Temperature π b : Base Failure Rate π Q : Quality Factor π E : Environment Factor π p : AbPQPE Failures / 10 ⁶ Hours										
						Amd.		Page	9	

Document NO.		GlobTek Inc.								
TYPE : Fuse TEST CONDITION AC INPUT :100V DC OUTPUT :12V/1.25A SPECIFICATION: ROOM TEMPERATURE : 25 ⁰ C										
P / N	Item	V	A	π m	S	π Q	π b	π E	π P	
	F1	250	2				0.01	2	0.02	DIP
Total π P=		0.02								
T : Component Temperature π b : Base Failure Rate π E : Environment Factor π p : AbPE Failures / 10 ⁶ Hours										
						Amd.		Page	10	

Document NO.		GlobTek Inc.										
TYPE : PCB TEST CONDITION AC INPUT :100V DC OUTPUT :12V/1.25A SPECIFICATION: ROOM TEMPERATURE : 25 ⁰ C												
P / N	Item	Spec	T	π b	N1	N2	π c	π Q	π E	π P		
	PCB		65	0.0004	200	0	1	2	1	0.16		
Total π P =		0.16										
π b : Base Failure Rate N1,N2 : Number of PTHS Factor π c : Complexity Factor π Q : Quality Factor π E : Environment Factor π p = π b((N1XPC+N2(PC+13))PQPE Failures / 10 ⁶ Hours												
										Amd.	Page	13

Document NO.		GlobTek Inc.								
TYPE : LED PHOTO TEST CONDITION AC INPUT :100V DC OUTPUT :12V/1.25A SPECIFICATION: ROOM TEMPERATURE : 25 ⁰ C										
P / N	Item	Spec	T	π b	π t	π Q	π E	π P		
	U2		62.7	0.0025	2.8617	5.5	2	0.0787	DIP	
Total π P=		0.078697403								
π b : Base Failure Rate π T : Complexity Factor π Q : Quality Factor π E : Environment Factor π p = π b* π T* π Q* π E* π P Failures / 10 ⁶ Hours										
								Amd.	Page	11

Document NO.											
TYPE : connector TEST CONDITION AC INPUT :100V DC OUTPUT :12V/1.25A SPECIFICATION: ROOM TEMPERATURE : 25 °C											
P / N	Item	parts type	PIN	π b	N1	N2	π k	π p	π E	π P	
	AC Inlet	2 PIN	2	0.0001313			2	1.0524	3	0.0008	
	AC PIN	2 PIN	2	0.0001313			2	1.0524	3	0.0008	
	DC Outlet	2 wire	2	0.0001313			2	1.0524	3	0.0008	
Total π P =		0.002486299									
π b : Base Failure Rate N1,N2 : Number of PTHS Factor π c : Complexity Factor π Q : Quality Factor π E : Environment Factor π p = π b((N1XPC+N2(PC+13))PQPE Failures / 10⁶ Hours											
Amd.								Page		12	