



Reliability Prediction Summary

File Name: EFAP-S601.rfp
Assembly: System
Ref Des:
Description:

Failure Rate: 3.142681
MTBF (hrs): 318,200
Temperature: 40
Environment: GB, GC - Ground Benign, Controlled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
150208050229500G	Resistor	1/8W,0805,2.2Ω,±5%	0.002822	11	0.031040
150208050100500G	Resistor	1/8W,0805,10Ω,±5%	0.002822	8	0.022574
150208050470500G	Resistor	1/8W,0805,47Ω,±5%	0.002822	1	0.002822
150208051000500G	Resistor	1/8W,0805,100Ω,±5%	0.002822	1	0.002822
150208052200500G	Resistor	1/8W,0805,220Ω,±5%	0.002822	2	0.005644
150208050013500G	Resistor	1/8W,0805,1KΩ,±5%	0.002822	6	0.016931
150208050472500G	Resistor	1/8W,0805,4.7KΩ,±5%	0.002822	1	0.002822
150208050512500G	Resistor	1/8W,0805,5.1KΩ,±5%	0.002822	3	0.008465
150208050103500G	Resistor	1/8W,0805,10KΩ,±5%	0.002822	12	0.033861
150208050203500G	Resistor	1/8W,0805,20KΩ,±5%	0.002822	3	0.008465
150208050363500G	Resistor	1/8W,0805,36KΩ,±5%	0.002822	1	0.002822
150208050393500G	Resistor	1/8W,0805,39KΩ,±5%	0.002822	1	0.002822
150208050473500G	Resistor	1/8W,0805,47KΩ,±5%	0.002822	1	0.002822
150208050513500G	Resistor	1/8W,0805,51KΩ,±5%	0.002822	2	0.005644
150208051003500G	Resistor	1/8W,0805,100KΩ,±5%	0.002822	1	0.002822
150208053903500G	Resistor	1/8W,0805,390KΩ,±5%	0.002822	1	0.002822
150208050155500G	Resistor	1/8W,0805,1.5MΩ,±5%	0.002822	3	0.008465
150208055629100G	Resistor	1/8W,0805,56.2Ω,±1%	0.002822	1	0.002822
150208055620100G	Resistor	1/8W,0805,562Ω,±1%	0.002822	1	0.002822
150208058660100G	Resistor	1/8W,0805,866Ω,±1%	0.002822	1	0.002822
150208059310100G	Resistor	1/8W,0805,931Ω,±1%	0.002822	1	0.002822
150208051961100G	Resistor	1/8W,0805,1.96KΩ,±1%	0.002822	1	0.002822
150208051022100G	Resistor	1/8W,0805,10.2Ω,±1%	0.002822	2	0.005644
150208056192100G	Resistor	1/8W,0805,61.9Ω,±1%	0.002822	1	0.002822
150208056342100G	Resistor	1/8W,0805,63.4Ω,±1%	0.002822	1	0.002822
150208054993100G	Resistor	1/8W,0805,499KΩ,±1%	0.002822	1	0.002822
150212060470500G	Resistor	1/4W,1206,47Ω,±5%	0.002822	3	0.008465
150212060013500G	Resistor	1/4W,1206,1KΩ,±5%	0.002822	1	0.002822
150212060272500G	Resistor	1/4W,1206,2.7Ω,±5%	0.002822	1	0.002822
150212063303500G	Resistor	1/4W,1206,330KΩ,±5%	0.002822	2	0.005644
150212060016500G	Resistor	1/4W,1206,1MΩ,±5%	0.002822	2	0.005644
150212069313100G	Resistor	1/4W,1206,931KΩ,±1%	0.002822	1	0.002822
150212060016100G	Resistor	1/4W,1206,1MΩ,±1%	0.002822	1	0.002822
160225120058100G	Resistor	2W,2512,0.5Ω,±1%	0.030736	2	0.061472
252210202560805G	Capacitor	0805,102,25V,±10%,SMD	0.005790	3	0.017370
25221030166080YG	Capacitor	0805,103,16V,±10%,SMD	0.005790	1	0.005790
25221030506080YG	Capacitor	0805,103,50V,±10%,SMD	0.005790	1	0.005790
25221040166080YG	Capacitor	0805,104,16V,±10%,SMD	0.005790	5	0.028950
25221040256080YG	Capacitor	0805,104,25V,±10%,SMD	0.005790	3	0.017370
25221040506080YG	Capacitor	0805,104,50V,±10%,SMD	0.005790	5	0.028950
25221050166080YG	Capacitor	0805,105,16V,±10%,SMD	0.005790	1	0.005790
25221050256080YG	Capacitor	0805,105,25V,±10%,SMD	0.005790	3	0.017370
25222250066080YG	Capacitor	0805,225,6.3V,±10%,SMD	0.005790	1	0.005790
252210505061206G	Capacitor	1206,105,50V,±10%,SMD	0.005790	1	0.005790
25222222006120YG	Capacitor	1206,222,200V,±10%,SMD	0.005790	1	0.005790
25221032026181YG	Capacitor	1812,103,2KV,±10%,SMD	0.005790	1	0.005790
401202004403152G	Semiconductor	Ic=-600mA,Vceo=-40V,SOT-23	0.000119	3	0.000358
401202000772159G	Semiconductor	-3A,-30V,HFE=160~320,SOT-23	0.000119	1	0.000119



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Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
401102004401182G	Semiconductor	Ic=600mA,Vceo=40V,SOT-23,SMD	0.000119	2	0.000239
401702258200154G	Semiconductor	0.25A,200V,SOT-23	0.000119	1	0.000119
404102158075009G	Semiconductor	IF=150mA,VR=75V,0805	0.002626	9	0.023632
404102030600092G	Semiconductor	IF=3A,VR=600V,SMC,SMD-代1N5406	0.002626	1	0.002626
404512020200092G	Semiconductor	2A,200V,VF=0.92V,SMB,SMD	0.002626	1	0.002626
404702021669089G	Semiconductor	6.3V~6.9V,1/2W,Iz=5mA,LLD	0.002626	1	0.002626
404702021519083G	Semiconductor	4.9V~5.3V,1/2W,Iz=5mA,LLD	0.002626	1	0.002626
404702021130069G	Semiconductor	12.55V~13.21V,1/2W,SOD-80	0.002626	1	0.002626
405062000393412G	Integrated Circuit	SO-8	0.003324	1	0.003324
405122001653419G	Integrated Circuit	SO-8	0.003324	1	0.003324
405132000510419G	Integrated Circuit	SOIC-8,SMD	0.003324	1	0.003324
405130027324413G	Integrated Circuit	SOIC-8	0.003324	1	0.003324
405132000539419G	Integrated Circuit	SOP-8L	0.003324	1	0.003324
240222545061781G	Capacitor	225,450V,±10%,P:22.5	0.002625	1	0.002625
220439742035081G	Capacitor	105°C,390uF,420V,±20%,φ35*30	0.002625	1	0.002625
220422801610026G	Capacitor	105°C,2200uF,16V,±20%,φ10*25	0.002625	1	0.002625
220410801008041G	Capacitor	105°C,1000uF,10V,±20%,φ8*20	0.002625	1	0.002625
220410802513092G	Capacitor	105°C,1000uF,25V,±20%,φ10*20	0.002625	6	0.015749
260210527572254G	Capacitor	105,275V,P=22.5,26.5*12.5*21.5	0.000843	1	0.000843
260210427571504G	Capacitor	104,275V,P=15,18*6*12mm	0.000843	1	0.000843
E-2600001	Capacitor	474,420V,10%,P=15mm	0.000843	1	0.000843
E-2700001	Capacitor	102,250V,±20%,φ7,P=10mm	0.000843	3	0.002529
405010257512219G	Integrated Circuit	1A,12V,TO-220	0.003324	1	0.003324
401300001450219G	Semiconductor	14A,500V,RDS<0.38Ω,TO-220	0.000119	4	0.000478
401300002560386G	Semiconductor	20A,600V,RDS=0.17Ω,TO-247	0.000119	2	0.000239
E-4045001	Semiconductor	8A,600V,TO-220AC	0.002626	1	0.002626
401300003632219G	Semiconductor	80A,100V,RDS=9mΩ,TO-220AB	0.000119	6	0.000716
404260200100219G	Semiconductor	20A,100V,TO-220AB,VF=0.85V	0.002626	2	0.005251
E0053219001	Inductor	OTC-27V(2S),9mH,0.9ψ*37Ts	0.000037	1	0.000037
E0053229001	Inductor	0.1ψ*80Ts	0.000037	1	0.000037
E0053225001	Inductor	170uH,1.0ψ*52Ts	0.000037	1	0.000037
E-3255001	Inductor	18uH	0.000037	1	0.000037
E-3229002	Inductor	1ψ*3P*14Ts	0.000037	2	0.000074
322507222651000G	Inductor	256uH,D0.45*80Ts	0.000037	1	0.000037
321305200165100G	Inductor	1.0uH,20%,D1.5*1*6.5Ts,+Tube	0.000037	2	0.000074
E-3212001	Inductor	3.3uH	0.000037	1	0.000037
E-3119001	Inductor	EP13	0.027013	1	0.027013
E-3116001	Inductor	ETD-39,2.5mH	0.027013	1	0.027013
150208050689500G	Resistor	1/8W,0805,6.8Ω,±5%	0.002822	1	0.002822
150208052200500G	Resistor	1/8W,0805,220Ω,±5%	0.002822	1	0.002822
150208050013500G	Resistor	1/8W,0805,1KΩ,±5%	0.002822	1	0.002822
150208050332500G	Resistor	1/8W,0805,3.3KΩ,±5%	0.002822	1	0.002822
150208054991100G	Resistor	1/8W,0805,4.99KΩ,±1%	0.002822	1	0.002822
150208055111100G	Resistor	1/8W,0805,5.11KΩ,±1%	0.002822	1	0.002822
150208056493100G	Resistor	1/8W,0805,649KΩ,±1%	0.002822	1	0.002822
150208056813100G	Resistor	1/8W,0805,681KΩ,±1%	0.002822	2	0.005644
150212060001500G	Resistor	1/4W,1206,1Ω,±5%	0.002822	1	0.002822
150212060229500G	Resistor	1/4W,1206,2.2Ω,±5%	0.002822	1	0.002822



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150212062200500G	Resistor	1/4W,1206,220Ω,±5%	0.002822	1	0.002822
25221040166080YG	Capacitor	0805,104,16V,±10%,SMD	0.005790	1	0.005790
25221021026120YG	Capacitor	1206,102,1KV,±10%,SMD	0.005790	2	0.011580
404502010200099G	Semiconductor	1A,200V,VF=0.95V,SMA,SMD	0.002626	2	0.005251
404602010600099G	Semiconductor	1A,600V,VF=1.7V,SMA	0.002626	1	0.002626
405012043123159G	Integrated Circuit	Vref=2.5V,SOT-23	0.003324	1	0.003324
405012007812199G	Integrated Circuit	0.2A,12V,SOT-89	0.003324	1	0.003324
401102004401182G	Semiconductor	Ic=600mA,Vceo=40V,SOT-23,SMD	0.000119	1	0.000119
404702021150489G	Semiconductor	14.25V~15.75V,1/2W,SOD-123	0.002626	1	0.002626
103001001003530G	Resistor	1W,100KΩ,±5%,Radial-Vet	0.002822	1	0.002822
220447701608092G	Capacitor	105°C,470uF,16V,±20%,φ8*16	0.002625	1	0.002625
220433603505041G	Capacitor	105°C,33uF,35V,±20%,φ5*11mm	0.002625	4	0.010500
220410801610092G	Capacitor	105°C,1000uF,16V,±20%,φ10*20	0.002625	1	0.002625
220447601605002G	Capacitor	105°C,47uF,16V,±20%,φ5*11	0.002625	1	0.002625
405030000243639G	Integrated Circuit	DIP-8B	0.003324	1	0.003324
404200200045219G	Semiconductor	20A,45V,TO-220AB	0.002626	1	0.002626
E-3212001	Inductor	3.3uH	0.000037	1	0.000037
E-3111001	Inductor	EE22,930uH	0.027013	1	0.027013
150206030000500G	Resistor	1/10W,0603,0Ω,±5%	0.002822	1	0.002822
150206030229500G	Resistor	1/10W,0603,2.2Ω,±5%	0.002822	1	0.002822
150206031000500G	Resistor	1/10W,0603,100Ω,±5%	0.002822	1	0.002822
150206030103500G	Resistor	1/10W,0603,10KΩ,±5%	0.002822	1	0.002822
150206031210100G	Resistor	1/10W,0603,121Ω,±1%	0.002822	1	0.002822
150206036650100G	Resistor	1/10W,0603,665Ω,±1%	0.002822	1	0.002822
150206030013100G	Resistor	1/10W,0603,1KΩ,±1%	0.002822	1	0.002822
150206031651100G	Resistor	1/10W,0603,1.65KΩ,±1%	0.002822	1	0.002822
150206034991100G	Resistor	1/10W,0603,4.99KΩ,±1%	0.002822	1	0.002822
150206030113100G	Resistor	1/10W,0603,11KΩ,±1%	0.002822	1	0.002822
150206030223100G	Resistor	1/10W,0603,22KΩ,±1%	0.002822	1	0.002822
25221020506060YG	Capacitor	0603,102,50V,±10%,SMD	0.005790	2	0.011580
252210501660805G	Capacitor	0805,105,16V,±10%,SMD	0.005790	2	0.011580
252222305060603G	Capacitor	0603,223,50V,±10%,SMD	0.005790	1	0.005790
25222240256060YG	Capacitor	0603,224,25V,±10%,SMD	0.005790	4	0.023160
25226820506060YG	Capacitor	0603,682,50V,±10%,SMD	0.005790	1	0.005790
25224750166120YG	Capacitor	1206,475,16V,±10%,SMD	0.005790	1	0.005790
25292260166121YG	Capacitor	1210,226,16V,±10%	0.005790	1	0.005790
202433700674003G	Capacitor	330uF,6.3V,±20%,D-Size	0.005790	1	0.005790
222418701610191G	Capacitor	105°C,180uF,16V,±20%,10*8	0.005790	1	0.005790
405052007073429G	Integrated Circuit	SOP-14	0.003324	1	0.003324
401302006298419G	Semiconductor	13A,30V,SO-8	0.000119	2	0.000239
401302006299419G	Semiconductor	21A,30V,SO-8	0.000119	2	0.000239
401202004403152G	Semiconductor	Ic=-600mA,Vceo=-40V,SOT-23	0.000119	1	0.000119
401102004401182G	Semiconductor	Ic=600mA,Vceo=40V,SOT-23,SMD	0.000119	1	0.000119
404242029030479G	Semiconductor	IF=0.2A,VR=30V,SOD-323	0.002626	1	0.002626
2204477006080B1G	Capacitor	105°C,470uF,6.3V,±20%,φ8*8	0.002625	1	0.002625
E0053275001	Inductor	2.75uH,1ψ*3*8Ts	0.000037	1	0.000037
150206030000500G	Resistor	1/10W,0603,0Ω,±5%	0.002822	1	0.002822
150206030229500G	Resistor	1/10W,0603,2.2Ω,±5%	0.002822	1	0.002822



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150206031000500G	Resistor	1/10W,0603,100Ω,±5%	0.002822	1	0.002822
150206030103500G	Resistor	1/10W,0603,10KΩ,±5%	0.002822	4	0.011287
150206031210100G	Resistor	1/10W,0603,121Ω,±1%	0.002822	1	0.002822
150206030013100G	Resistor	1/10W,0603,1KΩ,±1%	0.002822	1	0.002822
150206031071100G	Resistor	1/10W,0603,1.07KΩ,±1%	0.002822	1	0.002822
150206031651100G	Resistor	1/10W,0603,1.65KΩ,±1%	0.002822	1	0.002822
150206034991100G	Resistor	1/10W,0603,4.99KΩ,±1%	0.002822	1	0.002822
150206030752100G	Resistor	1/10W,0603,7.5KΩ,±1%	0.002822	1	0.002822
150206030223100G	Resistor	1/10W,0603,22KΩ,±1%	0.002822	1	0.002822
25221020506060YG	Capacitor	0603,102,50V,±10%,SMD	0.005790	2	0.011580
252210501660805G	Capacitor	0805,105,16V,±10%,SMD	0.005790	2	0.011580
252222305060603G	Capacitor	0603,223,50V,±10%,SMD	0.005790	1	0.005790
25222240256060YG	Capacitor	0603,224,25V,±10%,SMD	0.005790	4	0.023160
25226820506060YG	Capacitor	0603,682,50V,±10%,SMD	0.005790	1	0.005790
25224750166120YG	Capacitor	1206,475,16V,±10%,SMD	0.005790	1	0.005790
25292260166121YG	Capacitor	1210,226,16V,±10%	0.005790	1	0.005790
202433700674003G	Capacitor	330uF,6.3V,±20%,D-Size	0.005790	1	0.005790
222418701610191G	Capacitor	105°C,180uF,16V,±20%,10*8	0.005790	1	0.005790
405052007073429G	Integrated Circuit	SOP-14	0.003324	1	0.003324
401302006298419G	Semiconductor	13A,30V,SO-8	0.000119	2	0.000239
401302006299419G	Semiconductor	21A,30V,SO-8	0.000119	2	0.000239
401202004403152G	Semiconductor	Ic=-600mA,Vceo=-40V,SOT-23	0.000119	1	0.000119
401102004401182G	Semiconductor	Ic=600mA,Vceo=40V,SOT-23,SMD	0.000119	1	0.000119
404242029030479G	Semiconductor	IF=0.2A,VR=30V,SOD-323	0.002626	1	0.002626
2204477006080B1G	Capacitor	105°C,470uF,6.3V,±20%,φ8*8	0.002625	1	0.002625
E0053275001	Inductor	2.75uH,1ψ*3*8Ts	0.000037	2	0.000074
150208052200500G	Resistor	1/8W,0805,220Ω,±5%	0.002822	1	0.002822
150208050013500G	Resistor	1/8W,0805,1KΩ,±5%	0.002822	2	0.005644
150208050392500G	Resistor	1/8W,0805,3.9KΩ,±5%	0.002822	1	0.002822
150208050432500G	Resistor	1/8W,0805,4.3KΩ,±5%	0.002822	1	0.002822
150208050512500G	Resistor	1/8W,0805,5.1KΩ,±5%	0.002822	1	0.002822
150208052491100G	Resistor	1/8W,0805,2.49KΩ,±1%	0.002822	1	0.002822
150208055111100G	Resistor	1/8W,0805,5.11KΩ,±1%	0.002822	4	0.011287
150208051152100G	Resistor	1/8W,0805,11.5KΩ,±1%	0.002822	1	0.002822
150208058252100G	Resistor	1/8W,0805,82.5KΩ,±1%	0.002822	1	0.002822
150212060229500G	Resistor	1/4W,1206,2.2Ω,±5%	0.002822	2	0.005644
150212060332500G	Resistor	1/4W,1206,3.3KΩ,±5%	0.002822	1	0.002822
E-2521001	Capacitor	0805,101,16V,±5%	0.005790	1	0.005790
252210202560805G	Capacitor	0805,102,25V,±10%,SMD	0.005790	1	0.005790
25221040166080YG	Capacitor	0805,104,16V,±10%,SMD	0.005790	1	0.005790
25221050256080YG	Capacitor	0805,105,25V,±10%,SMD	0.005790	1	0.005790
252222101660805G	Capacitor	0805,221,16V,±10%,SMD	0.005790	1	0.005790
252222305060805G	Capacitor	0805,223,50V,±10%,SMD	0.005790	1	0.005790
252222501660805G	Capacitor	0805,225,16V,±10%,SMD	0.005790	2	0.011580
252156105050805G	Capacitor	0805,561,50V,±5%,SMD	0.005790	1	0.005790
25221050256120YG	Capacitor	1206,105,25V,±10%,SMD	0.005790	2	0.011580
405130003895463G	Integrated Circuit	SOIC-20	0.003324	1	0.003324
405130027324413G	Integrated Circuit	SOIC-8	0.201325	2	0.402649



Reliability Prediction Summary

File Name: EFAP-S601.rfp
 Assembly: System
 Ref Des:
 Description:

Failure Rate: 3.142681
 MTBF (hrs): 318,200
 Temperature: 40
 Environment: GB, GC - Ground Benign, Controlled

Part Number	Category	Ref Des	Unit Failure Rate	Quantity	Total Failure Rate
401102004401182G	Semiconductor	Ic=600mA,Vceo=40V,SOT-23,SMD	0.000119	1	0.000119
220410605005045G	Capacitor	105°C,10uF,50V,±20%,φ5*11mm	0.002625	3	0.007875
E-3119002	Inductor	EP13,D0.2*20Ts/D0.29*25Ts	0.027013	1	0.027013
150206035110100G	Resistor	1/10W,0603,511Ω,±1%	0.002822	1	0.002822
150206031432100G	Resistor	1/10W,0603,14.3KΩ,±1%	0.002822	1	0.002822
150206032212100G	Resistor	1/10W,0603,22.1KΩ,±1%	0.002822	1	0.002822
150206032672100G	Resistor	1/10W,0603,26.7KΩ,±1%	0.002822	1	0.002822
25221040256060YG	Capacitor	0603,104,25V,±10%,SMD	0.005790	7	0.040530
25221050166060YG	Capacitor	0603,105,16V,±10%,SMD	0.005790	1	0.005790
404102158075009G	Semiconductor	IF=150mA,VR=75V,0805	0.002626	12	0.031509
405112000130459G	Integrated Circuit	SOT-25,SMD	0.201325	6	1.207948
405062000339423G	Integrated Circuit	SOIC14	0.003324	1	0.003324
405062000393413G	Integrated Circuit	SOIC-8	0.003324	1	0.003324
405012043123159G	Integrated Circuit	Vref=2.5V,SOT-23	0.003324	1	0.003324
404900150600932G	Semiconductor	15A,600V,GBJ Type	0.002626	1	0.002626
504121525015204G	Miscellaneous	T15A,250V,Slow-Acting,φ5*20mm	0.010000	1	0.010000
E0050246001	Connection	2-Side,FR-4,1.6mm,2 O.Z.	0.051944	1	0.051944
E0050246002	Connection	2-Side,FR-4,1.2mm,2 O.Z.	0.051944	1	0.051944
E0050246003	Connection	2-Side,FR-4,1.6mm,2 O.Z.	0.051944	1	0.051944
E0050246004	Connection	2-Side,FR-4,1.6mm,2 O.Z.	0.051944	1	0.051944
E0050246005	Connection	2-Side,FR-4,1.2mm,2 O.Z.	0.051944	1	0.051944
E0050246006	Connection	2-Side,FR-4,1.2mm,2 O.Z.	0.051944	1	0.051944