

MTBF Calculation Review for ALFA APOE03G

Ref	Description	Part number	Quant	Per Billion Hrs	Per Billion Hrs	Note
				Unit FIT	Total FIT (24V 1A)	
R1,R2,R3,R4	RESISTOR 电阻	C/R 75 ohm 0.1W 0603 +/-5%	4	6.7306	26.9224	
R5	SMD Resistor	P/R 12K ohm 0.25W 1206 +/-5%	1	10.5469	10.5469	
R8	SMD Resistor	P/R 0 ohm 0.25W 1206 +/-5%	1	10.5469	10.5469	
C1,C2,C3	MLCC Capacitor	MLCC 1000pF ±10% 2KV 1206 X7R	3	0.0138	0.0415	
D15,D16	Diode	DIODE SK36A (SMA)	2	6.8200	13.6400	
TVS1,TVS2	DIODE (TVS)	KWSRV05-4 (SOT-23 6L)	2	0.0100	0.0200	
F1A	Fuse	Fuse 0466004.NR (1206)	1	20.0000	20.0000	
T1	LAN Transformer	TRANSFORME HST-24001DR (DIP)	1	10000.0000	10000.0000	
J3	DC Jack	DC4273W-B001-020000P Φ2.0 (DIP)	1	0.0022	0.0022	
J1, J2	LAN Jack	LAN JACK WS98LED-5631-S-F8C-G	2	5707.7600	11415.5200	
J4	Terminal (hold & plug)	EU Terminal 08mm 90D OPEN	1	21.9030	21.9030	
D1	LED (SMD)	BL-B2134 Green 5Φ (DIP)	1	0.0015	0.0015	
PCB	PCB	APOE03G	1	0.2180	0.218000	
		Overall FITS			21519.362	
		Overall MTBF (hours)			46470	

Note. Assume ambient temp = 30 deg C for Load 1A