



InHand Networks

IR305 MTBF REPORT

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Technical Support

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IR305 MTBF(Mean Time Between Failures)

$$\text{MTBF(Year)} = 1/\lambda_s = 1/(3845.8 \times 10^{-9}) / (24 \times 365) \approx 29.68$$

Part Number	Description	Quantity	Component basic failure rate $\lambda(10e-9/h)/FIT$	Sum of λ
EPCB030034	PCB	1	300	300
APSS010077	Connecter	2	2	4
ECAP000023	Capacitor	1	1.9	1.9
ECAP000031	Capacitor	2	1.9	3.8
ECAP050002	Capacitor	9	1.6	14.4
ECAP050005	Capacitor	1	1.6	1.6
ECAP050009	Capacitor	6	1.6	9.6
ECAP050049	Capacitor	1	1.6	1.6
ECAP050055	Capacitor	2	1.6	3.2
ECAP050060	Capacitor	1	1.6	1.6
ECAP050063	Capacitor	4	1.6	6.4
ECAP050064	Capacitor	5	1.6	8
ECAP050074	Capacitor	2	1.6	3.2
ECAP050077	Capacitor	35	1.6	56
ECAP050079	Capacitor	1	1.6	1.6
ECAP050093	Capacitor	2	1.6	3.2
ECAP050109	Capacitor	3	1.6	4.8
ECAP050110	Capacitor	5	1.6	8
ECAP050118	Capacitor	2	1.6	3.2
ECAP050121	Capacitor	2	1.6	3.2
ECAP050122	Capacitor	4	1.6	6.4
ECAP050134	Capacitor	4	1.6	6.4
ECAP050138	Capacitor	2	1.6	3.2
ECAP050157	Capacitor	1	1.6	1.6
ECAP050167	Capacitor	8	1.6	12.8
ECAP050178	Capacitor	10	1.6	16
ECAP050193	Capacitor	9	1.6	14.4
ECAP050197	Capacitor	10	1.6	16
ECAP050206	Capacitor	7	1.6	11.2
ECAP050240	Capacitor	4	1.6	6.4
ECAP050241	Capacitor	2	1.6	3.2
ECON060223	Connecter	1	11	11
ECON070003	Connecter	1	11	11
ECON070033	Connecter	1	11	11

ECON080007	Cable	2	11	22
ECON080032	Connecter	2	0.53	1.06
ECON090018	Connecter	1	52	52
ECON090083	Connecter	1	100	100
EDIO000025	DIODES	2	22	44
EDIO010008	LED	1	1.2	1.2
EDIO010019	LED	1	1.2	1.2
EDIO010090	LED	1	1.2	1.2
EDIO020008	DIODES	4	22	88
EFET010016	MOSFET	3	99	297
EICP000089	IC	1	500	500
EICP000099	IC	1	50	50
EICP010064	IC	1	32	32
EICP010071	IC	1	38	38
EICP020076	IC	1	5.6	5.6
EICP030115	IC	1	0.5	0.5
EICP030217	IC	1	0.6	0.6
EICP030240	IC	2	2	4
EICP040080	IC	1	2.7	2.7
EICP060041	IC	1	0.7	0.7
EIND000005	Inductor	1	0.22	0.22
EIND000021	Inductor	4	0.22	0.88
EIND000033	Inductor	5	0.22	1.1
EIND000053	Inductor	2	0.22	0.44
EIND000059	Inductor	1	0.22	0.22
EIND000070	Inductor	1	0.22	0.22
EIND020007	Inductor	4	0.22	0.88
EIND040001	Inductor	1	0.22	0.22
EIND050001	Inductor	5	0.22	1.1
EIND050008	Inductor	1	0.22	0.22
EIND080014	Inductor	2	0.22	0.44
ERES040038	Register	15	1.6	24
ERES040057	Register	1	1.6	1.6
ERES040060	Register	3	1.6	4.8
ERES040113	Register	2	1.6	3.2
ERES040151	Register	1	1.6	1.6
ERES040159	Register	2	1.6	3.2
ERES040162	Register	2	1.6	3.2
ERES040166	Register	4	1.6	6.4
ERES040180	Register	2	1.6	3.2
ERES040184	Register	1	1.6	1.6

ERES040200	Register	1	1.6	1.6
ERES040213	Register	9	1.6	14.4
ERES040235	Register	2	1.6	3.2
ERES040238	Register	1	1.6	1.6
ERES040271	Register	22	1.6	35.2
ERES040276	Register	10	1.6	16
ERES040308	Register	12	1.6	19.2
ERES040312	Register	3	1.6	4.8
ERES040352	Register	3	1.6	4.8
ERES040364	Register	1	1.6	1.6
ERES040365	Register	1	1.6	1.6
ERES040369	Register	1	1.6	1.6
ERES040509	Register	2	1.6	3.2
ERES040512	Register	2	1.6	3.2
ESEP000020	TVS	2	23	46
ESEP000033	TVS	1	23	23
ESEP000039	TVS	1	23	23
ESEP000063	TVS	1	23	23
ESEP000065	TVS	7	23	161
ESEP020010	FUSE	1	20	20
ESEP020021	FUSE	3	20	60
ESWT000062	Switch	1	300	300
ESWT010014	RELAY	1	348	348
ETFR050017	Transformer	1	4.2	4.2
ETFR050018	Transformer	2	4.2	8.4
ETSR000007	Transistor	2	1.1	2.2
EXTL010048	Crystal	1	96	96
SMDM000068	MODEM	1	748.60	748.6
Total:				3845.8