

ACCELUS CARD AMPLIFIER MTBF

MIL-HDBK-217F Parts Counts Reliability Prediction Method

ASC-0xx-xx

ITEM	QUANTITY	FAILURE RATE PER 10⁶ HOURS	QUALITY FACTOR	TOTAL FAILURE RATE PER 10⁶ HOURS
CAPACITOR, ALUMINUM OXIDE	9	0.02400	3.0	0.6480
CAPACITOR, CERAMIC	65	0.00360	3.0	0.7020
CAPACITOR, METALLIZED PAPER	2	0.00290	3.0	0.0174
CONNECTOR	3	0.00540	2.0	0.0324
DIODE, GENERAL PURPOSE	16	0.00360	5.5	0.3168
DIODE, LIGHT EMITTING	1	0.00047	8.0	0.0038
DIODE, SCHOTTKY	3	0.04700	2.5	0.3525
DIODE, ZENER	1	0.00330	5.5	0.0182
FET, SILICON	8	0.01400	8.0	0.8960
IC, BIPOLAR LINEAR	17	0.00950	2.0	0.3230
IC, REGULATOR	3	0.00950	8.0	0.2280
INDUCTORS, MOLDED	3	0.00170	4.0	0.0204
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
RECTIFIER, POWER	4	0.00280	8.0	0.0896
RESISTOR NETWORK, FILM	19	0.00230	3.0	0.1311
RESISTOR, METAL FILM	44	0.00120	3.0	0.1584
RESISTOR, WW POWER	5	0.01400	3.0	0.2100
SOLDERED CONNECTIONS (PTH)	84	0.00007	1.0	0.0059
THERMISTOR	1	0.06500	3.0	0.1950
TRANSFORMER	1	0.02300	3.0	0.0690
TRANSIENT VOLTAGE SUPPRESSOR	1	0.00290	5.5	0.0160
TRANSISTORS, BIPOLAR	3	0.00015	5.5	0.0025
			TOTAL	4.5030
			MTBF (HOURS)	222,073
			MTBF (YEARS)	25.35