

MODEL SEM-090-07 MTBF				
P/N 10-71313-01				
MTBF CALCULATION PER MIL-HDBK-217F PARTS COUNT RELIABILITY PREDICTION METHOD				
ITEM	QUANTITY	FAILURE RATE PER 10⁶ HOURS	QUALITY FACTOR	TOTAL FAILURE RATE PER 10⁶ HOURS
CAPACITOR, CERAMIC	199	0.00360	3.0	2.1492
CONNECTOR	9	0.00540	2.0	0.0972
DIODE, SCHOTTKY	14	0.04700	2.5	1.6450
DIODE, SWITCHING	12	0.00094	5.5	0.0620
DIODE, ZENER	2	0.00330	5.5	0.0363
FET, SILICON	10	0.01400	8.0	1.1200
IC, DIGITAL CMOS	21	0.00570	3.1	0.3711
IC, REGULATOR	4	0.00950	8.0	0.3040
INDUCTORS	5	0.00170	4.0	0.0340
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	3	0.00004	2.0	0.0002
PROM, EE	2	0.01000	2.0	0.0400
RECTIFIER, POWER	3	0.00280	8.0	0.0672
RESISTOR NETWORK, FILM	14	0.00230	3.0	0.0966
RESISTOR, METAL FILM	117	0.00120	3.0	0.4212
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1840	0.00007	1.0	0.1288
THERMISTOR	1	0.06500	3.0	0.1950
TRANSFORMER, FLYBACK	1	0.02300	3.0	0.0690
TRANSFORMER, PULSED	2	0.00350	3.0	0.0210
TRANSIENT VOLTAGE SUPPRESSOR	1	0.00290	5.5	0.0160
TRANSISTORS, BIPOLAR	3	0.00015	5.5	0.0025
			TOTAL	6.9855
			MTBF (HOURS)	143154
			MTBF (YRS)	16.34

MODEL SEM-090-10 MTBF				
P/N 10-71313-02				
MTBF CALCULATION PER MIL-HDBK-217F PARTS COUNT RELIABILITY PREDICTION METHOD				
ITEM	QUANTITY	FAILURE RATE PER 10⁶ HOURS	QUALITY FACTOR	TOTAL FAILURE RATE PER 10⁶ HOURS
CAPACITOR, CERAMIC	199	0.00360	3.0	2.1492
CONNECTOR	9	0.00540	2.0	0.0972
DIODE, SCHOTTKY	14	0.04700	2.5	1.6450
DIODE, SWITCHING	12	0.00094	5.5	0.0620
DIODE, ZENER	2	0.00330	5.5	0.0363
FET, SILICON	10	0.01400	8.0	1.1200
IC, DIGITAL CMOS	21	0.00570	3.1	0.3711
IC, REGULATOR	4	0.00950	8.0	0.3040
INDUCTORS	5	0.00170	4.0	0.0340
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	3	0.00004	2.0	0.0002
PROM, EE	2	0.01000	2.0	0.0400
RECTIFIER, POWER	3	0.00280	8.0	0.0672
RESISTOR NETWORK, FILM	14	0.00230	3.0	0.0966
RESISTOR, METAL FILM	117	0.00120	3.0	0.4212
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1840	0.00007	1.0	0.1288
THERMISTOR	1	0.06500	3.0	0.1950
TRANSFORMER, FLYBACK	1	0.02300	3.0	0.0690
TRANSFORMER, PULSED	2	0.00350	3.0	0.0210
TRANSIENT VOLTAGE SUPPRESSOR	1	0.00290	5.5	0.0160
TRANSISTORS, BIPOLAR	3	0.00015	5.5	0.0025
			TOTAL	6.9855
			MTBF (HOURS)	143154
			MTBF (YRS)	16.34

MODEL SPM-090-07 MTBF**P/N 10-71314-01****MTBF CALCULATION PER MIL-HDBK-217F PARTS COUNT RELIABILITY PREDICTION METHOD**

ITEM	QUANTITY	FAILURE RATE PER 10⁶ HOURS	QUALITY FACTOR	TOTAL FAILURE RATE PER 10⁶ HOURS
CAPACITOR, CERAMIC	180	0.00360	3.0	1.9440
CONNECTOR	9	0.00540	2.0	0.0972
DIODE, SCHOTTKY	14	0.04700	2.5	1.6450
DIODE, SWITCHING	12	0.00094	5.5	0.0620
DIODE, ZENER	2	0.00330	5.5	0.0363
FET, SILICON	10	0.01400	8.0	1.1200
IC, DIGITAL CMOS	21	0.00570	3.1	0.3711
IC, REGULATOR	4	0.00950	8.0	0.3040
INDUCTORS	5	0.00170	4.0	0.0340
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	3	0.00004	2.0	0.0002
PROM, EE	2	0.01000	2.0	0.0400
RECTIFIER, POWER	3	0.00280	8.0	0.0672
RESISTOR NETWORK, FILM	14	0.00230	3.0	0.0966
RESISTOR, METAL FILM	96	0.00120	3.0	0.3456
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1760	0.00007	1.0	0.1232
THERMISTOR	1	0.06500	3.0	0.1950
TRANSFORMER, FLYBACK	1	0.02300	3.0	0.0690
TRANSFORMER, PULSED	2	0.00350	3.0	0.0210
TRANSIENT VOLTAGE SUPPRESSOR	1	0.00290	5.5	0.0160
TRANSISTORS, BIPOLAR	3	0.00015	5.5	0.0025
			TOTAL	6.6991
			MTBF (HOURS)	149274
			MTBF (YRS)	17.04

MODEL SPM-090-10 MTBF				
P/N 10-71314-02				
MTBF CALCULATION PER MIL-HDBK-217F PARTS COUNT RELIABILITY PREDICTION METHOD				
ITEM	QUANTITY	FAILURE RATE PER 10⁶ HOURS	QUALITY FACTOR	TOTAL FAILURE RATE PER 10⁶ HOURS
CAPACITOR, CERAMIC	180	0.00360	3.0	1.9440
CONNECTOR	9	0.00540	2.0	0.0972
DIODE, SCHOTTKY	14	0.04700	2.5	1.6450
DIODE, SWITCHING	12	0.00094	5.5	0.0620
DIODE, ZENER	2	0.00330	5.5	0.0363
FET, SILICON	10	0.01400	8.0	1.1200
IC, DIGITAL CMOS	21	0.00570	3.1	0.3711
IC, REGULATOR	4	0.00950	8.0	0.3040
INDUCTORS	5	0.00170	4.0	0.0340
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	3	0.00004	2.0	0.0002
PROM, EE	2	0.01000	2.0	0.0400
RECTIFIER, POWER	3	0.00280	8.0	0.0672
RESISTOR NETWORK, FILM	14	0.00230	3.0	0.0966
RESISTOR, METAL FILM	96	0.00120	3.0	0.3456
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1760	0.00007	1.0	0.1232
THERMISTOR	1	0.06500	3.0	0.1950
TRANSFORMER, FLYBACK	1	0.02300	3.0	0.0690
TRANSFORMER, PULSED	2	0.00350	3.0	0.0210
TRANSIENT VOLTAGE SUPPRESSOR	1	0.00290	5.5	0.0160
TRANSISTORS, BIPOLAR	3	0.00015	5.5	0.0025
			TOTAL	6.6991
			MTBF (HOURS)	149274
			MTBF (YRS)	17.04