

MODEL XPL-230-18 MTBF				
P/N CC00-01075-000				
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, ALUMINUM OXIDE ELECT	13	0.00012	3.0	0.0047
CAPACITOR, CERAMIC	208	0.00099	3.0	0.6178
CONNECTOR	6	0.00540	2.0	0.0648
DIODE, GENERAL PURPOSE	7	0.00360	5.5	0.1386
DIODE, LIGHT EMITTING	4	0.00047	8.0	0.0150
DIODE, SCHOTTKY	20	0.00300	2.4	0.1440
DIODE, SWITCHING	7	0.00094	5.5	0.0362
DIODE, ZENER	21	0.00330	5.5	0.3812
FET, SILICON	7	0.01400	8.0	0.7840
IC, DIGITAL CMOS	77	0.00570	3.1	1.3606
IC, REGULATOR	18	0.00950	8.0	1.3680
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	3	0.00170	4.0	0.0204
OPTOCOUPLER/ISOLATOR	15	0.02700	8.0	3.2400
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	3	0.00002	1.0	0.0001
RECTIFIER, POWER	2	0.00280	8.0	0.0448
RELAY	1	0.43000	3.0	1.2900
RESISTOR NETWORK, FILM	11	0.00230	3.0	0.0759
RESISTOR, METAL FILM	210	0.00120	3.0	0.7560
RESISTOR, METAL FILM, PWR	2	0.01200	3.0	0.0720
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1308	0.00007	1.0	0.0903
SWITCH	2	0.00100	8.4	0.0168
THERMISTOR	4	0.06500	3.0	0.7800
TRANSFORMER, FLYBACK	2	0.02300	3.0	0.1380
TRANSIENT VOLTAGE SUPPRESSOR	6	0.00290	5.5	0.0957
TRANSISTORS, BIPOLAR	2	0.00015	5.5	0.0017
			TOTAL	11.7576
			MTBF (HOURS)	85052
			MTBF (YRS)	9.71

MODEL XPL-230-18-R MTBF				
P/N CC00-01075-003				
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, ALUMINUM OXIDE ELECT	15	0.00012	3.0	0.0054
CAPACITOR, CERAMIC	221	0.00099	3.0	0.6564
CONNECTOR	7	0.00540	2.0	0.0756
DIODE, GENERAL PURPOSE	7	0.00360	5.5	0.1386
DIODE, LIGHT EMITTING	4	0.00047	8.0	0.0150
DIODE, SCHOTTKY	22	0.00300	2.4	0.1584
DIODE, SWITCHING	2	0.00094	5.5	0.0103
DIODE, ZENER	21	0.00330	5.5	0.3812
FET, SILICON	28	0.01400	8.0	3.1360
IC, DIGITAL CMOS	63	0.00570	3.1	1.1132
IC, REGULATOR	12	0.00950	8.0	0.9120
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	3	0.00170	4.0	0.0204
OPTOCOUPLER/ISOLATOR	17	0.02700	8.0	3.6720
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	3	0.00002	1.0	0.0001
RECTIFIER, POWER	2	0.00280	8.0	0.0448
RELAY	1	0.43000	3.0	1.2900
RESISTOR NETWORK, FILM	24	0.00230	3.0	0.1656
RESISTOR, METAL FILM	180	0.00120	3.0	0.6480
RESISTOR, METAL FILM, PWR	13	0.01200	3.0	0.4680
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1326	0.00007	1.0	0.0915
SWITCH	2	0.00100	8.4	0.0168
THERMISTOR	4	0.06500	3.0	0.7800
TRANSFORMER, FLYBACK	2	0.02300	3.0	0.1380
TRANSIENT VOLTAGE SUPPRESSOR	7	0.00290	5.5	0.1117
			TOTAL	14.2701
			MTBF (HOURS)	70077
			MTBF (YRS)	8.00

MODEL XPL-230-36 MTBF				
P/N CC00-01075-001				
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, ALUMINUM OXIDE ELECT	15	0.00012	3.0	0.0054
CAPACITOR, CERAMIC	206	0.00099	3.0	0.6118
CONNECTOR	6	0.00540	2.0	0.0648
DIODE, GENERAL PURPOSE	7	0.00360	5.5	0.1386
DIODE, LIGHT EMITTING	4	0.00047	8.0	0.0150
DIODE, SCHOTTKY	20	0.00300	2.4	0.1440
DIODE, SWITCHING	2	0.00094	5.5	0.0103
DIODE, ZENER	21	0.00330	5.5	0.3812
FET, SILICON	25	0.01400	8.0	2.8000
IC, BIPOLAR LINEAR	3	0.00950	2.0	0.0570
IC, DIGITAL CMOS	56	0.00570	3.1	0.9895
IC, REGULATOR	9	0.00950	8.0	0.6840
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	3	0.00170	4.0	0.0204
OPTOCOUPLER/ISOLATOR	18	0.02700	8.0	3.8880
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	3	0.00002	1.0	0.0001
RECTIFIER, POWER	2	0.00280	8.0	0.0448
RELAY	1	0.43000	3.0	1.2900
RESISTOR NETWORK, FILM	27	0.00230	3.0	0.1863
RESISTOR, METAL FILM	180	0.00120	3.0	0.6480
RESISTOR, METAL FILM, PWR	12	0.01200	3.0	0.4320
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1274	0.00007	1.0	0.0879
SWITCH	2	0.00100	8.4	0.0168
THERMISTOR	4	0.06500	3.0	0.7800
TRANSFORMER, FLYBACK	2	0.02300	3.0	0.1380
TRANSIENT VOLTAGE SUPPRESSOR	6	0.00290	5.5	0.0957
			TOTAL	13.7508
			MTBF (HOURS)	72723
			MTBF (YRS)	8.30

MODEL XPL-230-36R MTBF				
P/N CC00-01075-004				
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, ALUMINUM OXIDE ELECT	15	0.00012	3.0	0.0054
CAPACITOR, CERAMIC	221	0.00099	3.0	0.6564
CONNECTOR	6	0.00540	2.0	0.0648
DIODE, GENERAL PURPOSE	7	0.00360	5.5	0.1386
DIODE, LIGHT EMITTING	4	0.00047	8.0	0.0150
DIODE, SCHOTTKY	20	0.00300	2.4	0.1440
DIODE, SWITCHING	2	0.00094	5.5	0.0103
DIODE, ZENER	21	0.00330	5.5	0.3812
FET, SILICON	25	0.01400	8.0	2.8000
IC, DIGITAL CMOS	62	0.00570	3.1	1.0955
IC, REGULATOR	13	0.00950	8.0	0.9880
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	3	0.00170	4.0	0.0204
OPTOCOUPLER/ISOLATOR	17	0.02700	8.0	3.6720
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	2	0.00002	1.0	0.0000
RECTIFIER, POWER	4	0.00280	8.0	0.0896
RELAY	1	0.43000	3.0	1.2900
RESISTOR NETWORK, FILM	33	0.00230	3.0	0.2277
RESISTOR, METAL FILM	182	0.00120	3.0	0.6552
RESISTOR, METAL FILM, PWR	12	0.01200	3.0	0.4320
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1342	0.00007	1.0	0.0926
SWITCH	2	0.00100	8.4	0.0168
THERMISTOR	4	0.06500	3.0	0.7800
TRANSFORMER, FLYBACK	2	0.02300	3.0	0.1380
TRANSIENT VOLTAGE SUPPRESSOR	7	0.00290	5.5	0.1117
TRANSISTORS, BIPOLAR	3	0.00015	5.5	0.0025
			TOTAL	14.0489
			MTBF (HOURS)	71180
			MTBF (YRS)	8.13

MODEL XPL-230-40 MTBF				
P/N CC00-01075-002				
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, ALUMINUM OXIDE ELECT	15	0.00012	3.0	0.0054
CAPACITOR, CERAMIC	206	0.00099	3.0	0.6118
CONNECTOR	7	0.00540	2.0	0.0756
DIODE, GENERAL PURPOSE	7	0.00360	5.5	0.1386
DIODE, LIGHT EMITTING	4	0.00047	8.0	0.0150
DIODE, SCHOTTKY	19	0.00300	2.4	0.1368
DIODE, SWITCHING	2	0.00094	5.5	0.0103
DIODE, ZENER	21	0.00330	5.5	0.3812
FET, SILICON	25	0.01400	8.0	2.8000
IC, DIGITAL CMOS	53	0.00570	3.1	0.9365
IC, REGULATOR	15	0.00950	8.0	1.1400
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	3	0.00170	4.0	0.0204
OPTOCOUPLER/ISOLATOR	17	0.02700	8.0	3.6720
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	1	0.00002	1.0	0.0000
RECTIFIER, POWER	3	0.00280	8.0	0.0672
RELAY	1	0.43000	3.0	1.2900
RESISTOR NETWORK, FILM	27	0.00230	3.0	0.1863
RESISTOR, METAL FILM	184	0.00120	3.0	0.6624
RESISTOR, METAL FILM, PWR	13	0.01200	3.0	0.4680
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1286	0.00007	1.0	0.0887
SWITCH	2	0.00100	8.4	0.0168
THERMISTOR	4	0.06500	3.0	0.7800
TRANSFORMER, FLYBACK	2	0.02300	3.0	0.1380
TRANSIENT VOLTAGE SUPPRESSOR	6	0.00290	5.5	0.0957
TRANSISTORS, BIPOLAR	3	0.00015	5.5	0.0025
			TOTAL	13.9605
			MTBF (HOURS)	71631
			MTBF (YRS)	8.18

MODEL XPL-230-40-R MTBF				
P/N CC00-01075-005				
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, ALUMINUM OXIDE ELECT	15	0.00012	3.0	0.0054
CAPACITOR, CERAMIC	221	0.00099	3.0	0.6564
CONNECTOR	10	0.00540	2.0	0.1080
DIODE, GENERAL PURPOSE	7	0.00360	5.5	0.1386
DIODE, LIGHT EMITTING	4	0.00047	8.0	0.0150
DIODE, SCHOTTKY	22	0.00300	2.4	0.1584
DIODE, SWITCHING	2	0.00094	5.5	0.0103
DIODE, ZENER	21	0.00330	5.5	0.3812
FET, SILICON	25	0.01400	8.0	2.8000
IC, DIGITAL CMOS	59	0.00570	3.1	1.0425
IC, REGULATOR	16	0.00950	8.0	1.2160
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	3	0.00170	4.0	0.0204
OPTOCOUPLER/ISOLATOR	17	0.02700	8.0	3.6720
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	2	0.00002	1.0	0.0000
RECTIFIER, POWER	2	0.00280	8.0	0.0448
RELAY	1	0.43000	3.0	1.2900
RESISTOR NETWORK, FILM	26	0.00230	3.0	0.1794
RESISTOR, METAL FILM	189	0.00120	3.0	0.6804
RESISTOR, METAL FILM, PWR	13	0.01200	3.0	0.4680
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1352	0.00007	1.0	0.0933
SWITCH	2	0.00100	8.4	0.0168
THERMISTOR	4	0.06500	3.0	0.7800
TRANSFORMER, FLYBACK	2	0.02300	3.0	0.1380
TRANSIENT VOLTAGE SUPPRESSOR	7	0.00290	5.5	0.1117
TRANSISTORS, BIPOLAR	3	0.00015	5.5	0.0025
			TOTAL	14.2503
			MTBF (HOURS)	70174
			MTBF (YRS)	8.01