

MODEL XTL-230-18 ROHS MTBF				
P/N 00-00837-000				
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	37	0.02400	3.0	2.6640
CAPACITOR, CERAMIC	190	0.00360	3.0	2.0520
CAPACITOR, METALLIZED FILM	16	0.00290	3.0	0.1392
CONNECTOR	4	0.00540	2.0	0.0432
DIODE, LIGHT EMITTING	2	0.00047	8.0	0.0075
DIODE, SCHOTTKY	4	0.04700	2.5	0.4700
DIODE, SWITCHING	18	0.00094	5.5	0.0931
DIODE, ZENER	22	0.00330	5.5	0.3993
FET, SILICON	8	0.01400	8.0	0.8960
IC, DIGITAL CMOS	54	0.00570	3.1	0.9542
IC, REGULATOR	12	0.00950	8.0	0.9120
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	2	0.00170	4.0	0.0136
OPTOCOUPLER/ISOLATOR	14	0.02700	8.0	3.0240
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	3	0.00004	2.0	0.0002
PROM, EE	3	0.01000	2.0	0.0600
RECTIFIER, POWER	20	0.00280	8.0	0.4480
RESISTOR NETWORK, FILM	38	0.00230	3.0	0.2622
RESISTOR, METAL FILM	186	0.00120	3.0	0.6696
RESISTOR, METAL FILM, PWR	12	0.01200	3.0	0.4320
RESISTOR, WW POWER	2	0.01400	3.0	0.0840
SOLDERED CONNECTIONS	1340	0.00007	1.0	0.0938
SWITCH	2	0.00100	8.4	0.0168
THERMISTOR	1	0.06500	3.0	0.1950
TRANSFORMER, FLYBACK	6	0.02300	3.0	0.4140
TRANSIENT VOLTAGE SUPPRESSOR	4	0.00290	5.5	0.0638
TRANSISTORS, BIPOLAR	8	0.00015	5.5	0.0066
			TOTAL	14.5933
			MTBF (HOURS)	68525
			MTBF (YRS)	7.82

MODEL XTL-230-18-R MTBF				
P/N 00-00740-000				
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	16	0.02400	3.0	1.1520
CAPACITOR, CERAMIC	159	0.00360	3.0	1.7172
CAPACITOR, METALLIZED FILM	8	0.00290	3.0	0.0696
CONNECTOR	4	0.00540	2.0	0.0432
DIODE, LIGHT EMITTING	2	0.00047	8.0	0.0075
DIODE, SCHOTTKY	4	0.04700	2.5	0.4700
DIODE, SWITCHING	11	0.00094	5.5	0.0569
DIODE, ZENER	11	0.00330	5.5	0.1997
FET, SILICON	6	0.01400	8.0	0.6720
IC, DIGITAL CMOS	39	0.00570	3.1	0.6891
IC, REGULATOR	7	0.00950	8.0	0.5320
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	1	0.00170	4.0	0.0068
OPTOCOUPLER/ISOLATOR	12	0.02700	8.0	2.5920
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	2	0.00004	2.0	0.0002
PROM, EE	3	0.01000	2.0	0.0600
RECTIFIER, POWER	11	0.00280	8.0	0.2464
RESISTOR NETWORK, FILM	35	0.00230	3.0	0.2415
RESISTOR, METAL FILM	117	0.00120	3.0	0.4212
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	928	0.00007	1.0	0.0650
SWITCH	2	0.00100	8.4	0.0168
THERMISTOR	1	0.06500	3.0	0.1950
TRANSFORMER, FLYBACK	3	0.02300	3.0	0.2070
TRANSIENT VOLTAGE SUPPRESSOR	3	0.00290	5.5	0.0479
TRANSISTORS, BIPOLAR	4	0.00015	5.5	0.0033
			TOTAL	9.9333
			MTBF (HOURS)	100671
			MTBF (YRS)	11.49

MODEL XTL-230-18-S ROHS MTBF				
P/N 00-00828-000				
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	37	0.02400	3.0	2.6640
CAPACITOR, CERAMIC	190	0.00360	3.0	2.0520
CAPACITOR, METALLIZED FILM	16	0.00290	3.0	0.1392
CONNECTOR	4	0.00540	2.0	0.0432
DIODE, LIGHT EMITTING	2	0.00047	8.0	0.0075
DIODE, SCHOTTKY	4	0.04700	2.5	0.4700
DIODE, SWITCHING	18	0.00094	5.5	0.0931
DIODE, ZENER	22	0.00330	5.5	0.3993
FET, SILICON	8	0.01400	8.0	0.8960
IC, DIGITAL CMOS	54	0.00570	3.1	0.9542
IC, REGULATOR	12	0.00950	8.0	0.9120
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	2	0.00170	4.0	0.0136
OPTOCOUPLER/ISOLATOR	14	0.02700	8.0	3.0240
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	3	0.00004	2.0	0.0002
PROM, EE	3	0.01000	2.0	0.0600
RECTIFIER, POWER	20	0.00280	8.0	0.4480
RESISTOR NETWORK, FILM	38	0.00230	3.0	0.2622
RESISTOR, METAL FILM	186	0.00120	3.0	0.6696
RESISTOR, METAL FILM, PWR	12	0.01200	3.0	0.4320
RESISTOR, WW POWER	2	0.01400	3.0	0.0840
SOLDERED CONNECTIONS	1340	0.00007	1.0	0.0938
SWITCH	2	0.00100	8.4	0.0168
THERMISTOR	1	0.06500	3.0	0.1950
TRANSFORMER, FLYBACK	6	0.02300	3.0	0.4140
TRANSIENT VOLTAGE SUPPRESSOR	4	0.00290	5.5	0.0638
TRANSISTORS, BIPOLAR	8	0.00015	5.5	0.0066
			TOTAL	14.5933
			MTBF (HOURS)	68525
			MTBF (YRS)	7.82

MODEL XTL-230-36 ROHS MTBF				
P/N 00-00831-000				
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	35	0.02400	3.0	2.5200
CAPACITOR, CERAMIC	227	0.00360	3.0	2.4516
CAPACITOR, METALLIZED FILM	8	0.00290	3.0	0.0696
CONNECTOR	8	0.00540	2.0	0.0864
DIODE, LIGHT EMITTING	4	0.00047	8.0	0.0150
DIODE, SCHOTTKY	2	0.04700	2.5	0.2350
DIODE, SWITCHING	15	0.00094	5.5	0.0776
DIODE, ZENER	11	0.00330	5.5	0.1997
FET, SILICON	10	0.01400	8.0	1.1200
IC, DIGITAL CMOS	75	0.00570	3.1	1.3253
IC, REGULATOR	11	0.00950	8.0	0.8360
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	1	0.00170	4.0	0.0068
OPTOCOUPLER/ISOLATOR	10	0.02700	8.0	2.1600
OSCILLATOR, CRYSTAL	2	0.03200	2.1	0.1344
PCB	3	0.00004	2.0	0.0002
PROM, EE	6	0.01000	2.0	0.1200
RECTIFIER, POWER	10	0.00280	8.0	0.2240
RESISTOR NETWORK, FILM	67	0.00230	3.0	0.4623
RESISTOR, METAL FILM	141	0.00120	3.0	0.5076
RESISTOR, METAL FILM, PWR	9	0.01200	3.0	0.3240
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1348	0.00007	1.0	0.0944
SWITCH	4	0.00100	8.4	0.0336
THERMISTOR	2	0.06500	3.0	0.3900
TRANSFORMER, FLYBACK	3	0.02300	3.0	0.2070
TRANSIENT VOLTAGE SUPPRESSOR	4	0.00290	5.5	0.0638
TRANSISTORS, BIPOLAR	4	0.00015	5.5	0.0033
			TOTAL	13.8215
			MTBF (HOURS)	72351
			MTBF (YRS)	8.26

MODEL XTL-230-36-R MTBF				
P/N 00-00734-000				
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	24	0.02400	3.0	1.7280
CAPACITOR, CERAMIC	151	0.00360	3.0	1.6308
CAPACITOR, METALLIZED FILM	8	0.00290	3.0	0.0696
CONNECTOR	4	0.00540	2.0	0.0432
DIODE, LIGHT EMITTING	2	0.00047	8.0	0.0075
DIODE, SCHOTTKY	4	0.04700	2.5	0.4700
DIODE, SWITCHING	11	0.00094	5.5	0.0569
DIODE, ZENER	11	0.00330	5.5	0.1997
FET, SILICON	6	0.01400	8.0	0.6720
IC, DIGITAL CMOS	43	0.00570	3.1	0.7598
IC, REGULATOR	8	0.00950	8.0	0.6080
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	1	0.00170	4.0	0.0068
OPTOCOUPLER/ISOLATOR	8	0.02700	8.0	1.7280
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	2	0.00004	2.0	0.0002
PROM, EE	3	0.01000	2.0	0.0600
RECTIFIER, POWER	10	0.00280	8.0	0.2240
RESISTOR NETWORK, FILM	35	0.00230	3.0	0.2415
RESISTOR, METAL FILM	117	0.00120	3.0	0.4212
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	928	0.00007	1.0	0.0650
SWITCH	2	0.00100	8.4	0.0168
THERMISTOR	1	0.06500	3.0	0.1950
TRANSFORMER, FLYBACK	3	0.02300	3.0	0.2070
TRANSIENT VOLTAGE SUPPRESSOR	3	0.00290	5.5	0.0479
TRANSISTORS, BIPOLAR	4	0.00015	5.5	0.0033
			TOTAL	9.6832
			MTBF (HOURS)	103271
			MTBF (YRS)	11.79

MODEL XTL-230-36-S ROHS MTBF				
P/N 00-00822-000				
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	35	0.02400	3.0	2.5200
CAPACITOR, CERAMIC	227	0.00360	3.0	2.4516
CAPACITOR, METALLIZED FILM	8	0.00290	3.0	0.0696
CONNECTOR	8	0.00540	2.0	0.0864
DIODE, LIGHT EMITTING	4	0.00047	8.0	0.0150
DIODE, SCHOTTKY	2	0.04700	2.5	0.2350
DIODE, SWITCHING	15	0.00094	5.5	0.0776
DIODE, ZENER	11	0.00330	5.5	0.1997
FET, SILICON	10	0.01400	8.0	1.1200
IC, DIGITAL CMOS	75	0.00570	3.1	1.3253
IC, REGULATOR	11	0.00950	8.0	0.8360
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	1	0.00170	4.0	0.0068
OPTOCOUPLER/ISOLATOR	10	0.02700	8.0	2.1600
OSCILLATOR, CRYSTAL	2	0.03200	2.1	0.1344
PCB	3	0.00004	2.0	0.0002
PROM, EE	6	0.01000	2.0	0.1200
RECTIFIER, POWER	10	0.00280	8.0	0.2240
RESISTOR NETWORK, FILM	67	0.00230	3.0	0.4623
RESISTOR, METAL FILM	141	0.00120	3.0	0.5076
RESISTOR, METAL FILM, PWR	9	0.01200	3.0	0.3240
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1348	0.00007	1.0	0.0944
SWITCH	4	0.00100	8.4	0.0336
THERMISTOR	2	0.06500	3.0	0.3900
TRANSFORMER, FLYBACK	3	0.02300	3.0	0.2070
TRANSIENT VOLTAGE SUPPRESSOR	4	0.00290	5.5	0.0638
TRANSISTORS, BIPOLAR	4	0.00015	5.5	0.0033
			TOTAL	13.8215
			MTBF (HOURS)	72351
			MTBF (YRS)	8.26

MODEL XTL-230-40 ROHS MTBF				
P/N 00-00834-000				
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	35	0.02400	3.0	2.5200
CAPACITOR, CERAMIC	227	0.00360	3.0	2.4516
CAPACITOR, METALLIZED FILM	8	0.00290	3.0	0.0696
CONNECTOR	8	0.00540	2.0	0.0864
DIODE, LIGHT EMITTING	4	0.00047	8.0	0.0150
DIODE, SCHOTTKY	2	0.04700	2.5	0.2350
DIODE, SWITCHING	15	0.00094	5.5	0.0776
DIODE, ZENER	11	0.00330	5.5	0.1997
FET, SILICON	10	0.01400	8.0	1.1200
IC, DIGITAL CMOS	75	0.00570	3.1	1.3253
IC, REGULATOR	11	0.00950	8.0	0.8360
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	1	0.00170	4.0	0.0068
OPTOCOUPLER/ISOLATOR	10	0.02700	8.0	2.1600
OSCILLATOR, CRYSTAL	2	0.03200	2.1	0.1344
PCB	3	0.00004	2.0	0.0002
PROM, EE	6	0.01000	2.0	0.1200
RECTIFIER, POWER	10	0.00280	8.0	0.2240
RESISTOR NETWORK, FILM	67	0.00230	3.0	0.4623
RESISTOR, METAL FILM	141	0.00120	3.0	0.5076
RESISTOR, METAL FILM, PWR	9	0.01200	3.0	0.3240
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1348	0.00007	1.0	0.0944
SWITCH	4	0.00100	8.4	0.0336
THERMISTOR	2	0.06500	3.0	0.3900
TRANSFORMER, FLYBACK	3	0.02300	3.0	0.2070
TRANSIENT VOLTAGE SUPPRESSOR	4	0.00290	5.5	0.0638
TRANSISTORS, BIPOLAR	4	0.00015	5.5	0.0033
			TOTAL	13.8215
			MTBF (HOURS)	72351
			MTBF (YRS)	8.26

MODEL XTL-230-40-R MTBF				
P/N 00-00737-000				
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	24	0.02400	3.0	1.7280
CAPACITOR, CERAMIC	151	0.00360	3.0	1.6308
CAPACITOR, METALLIZED FILM	8	0.00290	3.0	0.0696
CONNECTOR	4	0.00540	2.0	0.0432
DIODE, LIGHT EMITTING	2	0.00047	8.0	0.0075
DIODE, SCHOTTKY	4	0.04700	2.5	0.4700
DIODE, SWITCHING	11	0.00094	5.5	0.0569
DIODE, ZENER	11	0.00330	5.5	0.1997
FET, SILICON	6	0.01400	8.0	0.6720
IC, DIGITAL CMOS	44	0.00570	3.1	0.7775
IC, REGULATOR	7	0.00950	8.0	0.5320
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	1	0.00170	4.0	0.0068
OPTOCOUPLER/ISOLATOR	8	0.02700	8.0	1.7280
OSCILLATOR, CRYSTAL	1	0.03200	2.1	0.0672
PCB	2	0.00004	2.0	0.0002
PROM, EE	3	0.01000	2.0	0.0600
RECTIFIER, POWER	10	0.00280	8.0	0.2240
RESISTOR NETWORK, FILM	35	0.00230	3.0	0.2415
RESISTOR, METAL FILM	117	0.00120	3.0	0.4212
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	928	0.00007	1.0	0.0650
SWITCH	2	0.00100	8.4	0.0168
THERMISTOR	1	0.06500	3.0	0.1950
TRANSFORMER, FLYBACK	3	0.02300	3.0	0.2070
TRANSIENT VOLTAGE SUPPRESSOR	3	0.00290	5.5	0.0479
TRANSISTORS, BIPOLAR	4	0.00015	5.5	0.0033
			TOTAL	9.6249
			MTBF (HOURS)	103897
			MTBF (YRS)	11.86

MODEL XTL-230-40-S ROHS MTBF				
P/N 00-00825-000				
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	35	0.02400	3.0	2.5200
CAPACITOR, CERAMIC	227	0.00360	3.0	2.4516
CAPACITOR, METALLIZED FILM	8	0.00290	3.0	0.0696
CONNECTOR	8	0.00540	2.0	0.0864
DIODE, LIGHT EMITTING	4	0.00047	8.0	0.0150
DIODE, SCHOTTKY	2	0.04700	2.5	0.2350
DIODE, SWITCHING	15	0.00094	5.5	0.0776
DIODE, ZENER	11	0.00330	5.5	0.1997
FET, SILICON	10	0.01400	8.0	1.1200
IC, DIGITAL CMOS	75	0.00570	3.1	1.3253
IC, REGULATOR	11	0.00950	8.0	0.8360
IGBT	1	0.01400	8.0	0.1120
INDUCTORS	1	0.00170	4.0	0.0068
OPTOCOUPLER/ISOLATOR	10	0.02700	8.0	2.1600
OSCILLATOR, CRYSTAL	2	0.03200	2.1	0.1344
PCB	3	0.00004	2.0	0.0002
PROM, EE	6	0.01000	2.0	0.1200
RECTIFIER, POWER	10	0.00280	8.0	0.2240
RESISTOR NETWORK, FILM	67	0.00230	3.0	0.4623
RESISTOR, METAL FILM	141	0.00120	3.0	0.5076
RESISTOR, METAL FILM, PWR	9	0.01200	3.0	0.3240
RESISTOR, WW POWER	1	0.01400	3.0	0.0420
SOLDERED CONNECTIONS	1348	0.00007	1.0	0.0944
SWITCH	4	0.00100	8.4	0.0336
THERMISTOR	2	0.06500	3.0	0.3900
TRANSFORMER, FLYBACK	3	0.02300	3.0	0.2070
TRANSIENT VOLTAGE SUPPRESSOR	4	0.00290	5.5	0.0638
TRANSISTORS, BIPOLAR	4	0.00015	5.5	0.0033
			TOTAL	13.8215
			MTBF (HOURS)	72351
			MTBF (YRS)	8.26