

mega-fabs Drive (D2-0423-S-B(F)) MTBF  
 HIWIN P/N:FD000MD22001

MTBF CALCULATION PER MIL-HDBK-217F PARTS COUNT RELIABILITY PREDICTION METHOD

ITEM	QUANTITY	FAILURE RATE PER 10 <sup>6</sup> HOURS	QUALITY FACTOR	TOTAL FAILURE RATE PER 10 <sup>6</sup> HOURS
CAPACITOR, CERAMIC	231	0.00360	3.00000	2.4948
CAPACITOR, ELECTROLYTIC	10	0.02400	3.00000	0.7200
CAPACITOR, METALLIZED PAPER	5	0.00290	3.00000	0.0435
CAPACITOR, TANTALUM	1	0.00150	3.00000	0.0045
CONNECTOR	10	0.00540	2.00000	0.1080
DIODE, GENERAL PURPOSE	11	0.00360	5.50000	0.2178
DIODE, LIGHT EMITTING	1	0.00047	8.00000	0.0038
DIODE, ZENER	3	0.00330	5.50000	0.0545
Display, LCD	1	0.00300	8.00000	0.0240
FET, SILICON	5	0.01400	8.00000	0.5600
FUSE	1	0.01000	8.00000	0.0800
IC, BIPOLAR LINEAR	32	0.00950	2.00000	0.6080
IC, DIGITAL CMOS	1	0.00570	3.10000	0.0177
IC, REGULATOR	6	0.00950	8.00000	0.4560
IGBT	4	0.01400	8.00000	0.4480
INDUCTOR, MOLDED	5	0.01700	4.00000	0.3400
OPTO-ISOLATOR	23	0.01300	8.00000	2.3920
OSCILLATOR, CRYSTAL	1	0.03200	2.10000	0.0672
SWITCH	4	0.00100	8.40000	0.0336
RECTIFIER, POWER	3	0.00280	3.00000	0.0252
RELAY	1	0.43000	3.00000	1.2900
RESISTOR, METAL FILM	310	0.00120	3.00000	1.1160
RESISTOR, METAL FILM POWER	2	0.01200	8.00000	0.1920
TANSFORMER FLYBACK	1	0.02300	3.00000	0.0690
TANSIENT VOLTAGE SUPPRESSOR	3	0.00290	5.50000	0.0479
THERMISTOR	2	0.06500	3.00000	0.3900
TRANSISTOR, BIPOLAR	4	0.00015	5.50000	0.0033
SOLDERED CONNECTIONS	1362	0.00007	1.00000	0.0953
			<b>TOTAL</b>	<b>11.9020</b>
			<b>MTBF(HRS)</b>	<b>84020</b>
			<b>MTBF(YRS)</b>	<b>9.59</b>