SWITCH CATALOG





REFERENCE DOCUMENTS Rating, Cross Reference and Engineering Data

MIL Specifications

	MIL SPECIFICATION					
TEST REQUIREMENT	MILPRF-8805	MIL-PRF-22885	MIL-DTL-3950	MIL-DTL-8834		
1 .Strength of Terminal	Solder - 9 lb. #4 Screw - 5 lb. #6 Screw - 30 lb. Leads - 15 lb.	Solder - 5 lb. #4 Screw - 5 lb. #6 Screw - 30 lb. Leads - 15 lb.	5 lb. solder lug. 25 lb. screw term. 5 lb. in. torque screw term. 15 lb. I.W.T.S. term.	5 lb. solder lug 25 lb. screw term. 5 lb. in. torque screw term. 5 lb. I.W.T.S. term.		
2. Strength of Actuating Lever Pivot and Stop	10 lb.	25 lb.	25 lb. throughout range	25 lb. throughout range		
3. Strength of Mounting Means	15 lbin.	15 lbin.	25 lbin. torque	65 lbin. torque 15/32 & over 15 lbin. torque under 15/32		
4. Dielectric (Sea Level) Indication Dielectric (Altitude)	1000V ac for one minute 500V ac above 10,000 ft.	1000V ac for one minute 400V ac above 10,000 ft.	1200V ac Group A 750V ac after electrical endur- ance toggle to terminal only. 500 microampere max. leakage 500V ac (65K ft.)	1800V ac Group A 500 microamperes max. leakage 500V ac (65K ft.)		
5. Contact Voltage Drop	Contact Resistance .025 Ohm New .040 Ohm After Mechanical Life	Contact Resistance .025 Ohm New .080 Ohm After Electrical Life	2.5 millivolt initial 5.0 millivolt after mechanical endurance I.W.T.S. 8.0 millivolt initial @2-6Vdc 0.1 amp.	1.0 millivolt initial @ 2-6V dc 0.1 amp.		
6. Temperature Rise	50 deg. C max. at rated resis- tive load after life	50 deg. C max. at rated resis- tive load after life	50 deg. C rise @ rated res. after endurance test current	50 deg. C rise @ rated res. after endurance test current		
7. Short Circuit	60 times rated resistive load	60 times rated resistive load	10 oper. make & carry 60 x rated resistive load @ lowest dc V	10 oper. make & carry 60 x rated resistive load @ low- est dc V		
8. Mechanical Life	As specified at high and low temperature		20K operations -65 deg. C 20K operations +71 deg. C	20K operations -55 deg. C 20K operations +71 deg. C		
9. Electrical Endurance	As specified	As specified	20K operations	20K operations		
10. Overload	50 operations @ 150% rated resistive load	50 operations @ 150% rated resistive load	50 operations @ 150% rated resistive load	50 operations @ 150% rated resistive load		
11. A) Electrical Endurance at AltitudeB) Electrical Endurance at	Sequence of test, ratings and environmental conditions are specified in MIL-S-8805	Sequence of test, ratings and environmental conditions are specified in MIL-S-22885	20K oper. resistive load @65K ft. rm temp 20K oper. ind. load @65K ft. rm. temp. Performed on separate test samples 20K operations resistive load	20K oper. resistive load @65K ft. rm temp 20K oper. ind. load @65K ft. rm. temp. Performed on separate test samples 20K operations resistive load @ rm. temp.		
Sea Level			@71 deg. C 20K operations ind. load @ rm. temp. Performed on separate test samples	20K operations ind. load @ rm. temp. Performed on separate test samples		
12. Vibration	See Detail Sheet	See Detail Sheet	Method 204 of MIL-STD-202. Test Condition A .06 D.A. or 10 G's 10-500 Hz 10 micro sec. max. chatter	Method 204 of MIL-STD-202. Test Condition D .06 D.A. or 20 G's 2000 Hz 10 micro sec. max. chatter		
13. Shock	See Detail Sheet	See Detail Sheet	Pulse-Method 213 of MIL-STD-202, Test Condition B @ 75 G's 10 micro sec. max. chatter Pulse-Method 213 of MIL-STD-202,	Test Condition I @ 100G's 10 micro sec. max. chatter		
14. Salt Spray Test Upon Completion	MIL-STD-202 Method 101 See Detail Sheet	MIL-STD-202 Method 101 See Detail Sheet	48 hours-Method 101 of MIL- STD-202, Test Condition B 10 operations @ lowest rated dc voltage	96 hours-Method 101 of MIL- STD-202, Test Condition A Env. 50 oper. @ rated resistive current and lowest rated dc V		
15. Moisture Resistance	MIL-STD-202 Method 106, 100V dc potential between cur- rent carrying parts & panel	MIL-STD-202 Method 106, 100V dc potential between cur- rent carrying parts & panel	Method 106 of MIL-STD-202 10 days, 100V dc potential between current carrying parts & panel	Method 106 of MIL-STD-202, 10 days, 100V dc potential between current carrying parts & panel, 0.1 A. max. leakage		

REFERENCE DOCUMENTS Rating, Cross Reference and Engineering Data

MIL Specifications - Continued						
	MIL SPECIFICATION					
TEST REQUIREMENT	MIL-S-8805	MIL-S-22885	MIL-DTL-3950F	MIL-DTL-8834F		
See Detail Sheet	See Detail Sheet	Method 110 of MIL-STD-202, Test Cond. B; 6 hrs @ 23 deg. C; 6 hrs @ 63 deg. C.	Method 110 of MIL-STD-202, Test Cond. B; 6 hours @ 23 deg. C, 6 hrs @ 63 deg. C.			
17. Explosion			Method 109 of MIL-STD-202.			
MIL-STD-202 Method 109	MIL-STD-202 Method 109	No Requirement	Max. rated dc inductive load toggle seal only.			
18. Sealing	See Detail Sheet	See Detail Sheet	1) Non destructive-submerge in H20 @ 2.0 +/5 in. of Hg for 5 minutes	 Lever seal - 20K operations at 6.5 lbs./in2 water pres- sure - seal only submerged 1/4" bushings only ⁽³⁾ 		
			 Destructive-no leakage when sub-merged in sodium chlo- ride solution at 2.0 +/5 in. of Hg for 4 hrs and sub merged at sea level for 16 hours 	 2) Environmental seal: A-Non destmass spectr. B- Destructive-submerge sw. in ethylene glycol, temp. range -18 deg. C to +71 deg. C, 20K oper. Sws. checked for contact V drop & dielectric 		
19. A) Toggle Seal B) Bushing Seal			No Requirement See Sealing	1 hr ea. lever pos. @-55 deg C Toggle ICE		
20. Temperature Operation	See Detail Sheet	-55 deg. C to +85 deg. C	See Mechanical Life	See Mechanical Life		
21. Life Low Cur. Level	See Detail Sheet	See Detail Sheet	40K operations @25 deg. C; Method 311 of MIL-STD-202	when specified 20K operations @71 deg. C; 5 millivolt, 5 microamp		
22. Fungus	Non-nutrient materials only	Non-nutrient materials only	No Requirement	No Requirement		
23. Intermediate Current	See Detail Sheet	27 +3 -OV dc & Relay M5757/10-033	20K operations @35-40 mA res. load. Lowest rated dc V and 71 deg. C amb.	See Life Low Cur. Level		
24. Thermal Shock	MIL-STD-202 Method 107	MIL-STD-202 Method 107	Method 107 of MIL-STD-202, Test Condition B; 5 cycles @ -65 deg. C/ +125 deg. C	Method 107 of MIL-STD-202, Test Cond. A, 5 cycles @ -55 deg. C/+85 deg. C		

③ Toggle seal - 5 operations under 0.5 inches of H2O above top of bushing