

FAILURE MODE, EFFECTS AND CRITICALITY ANALYSIS

PROJECT: Simple Flashlight Example

FAILURE RATE: 110.0000 Failures/Million Hrs.  
 MTBF: 9090.91 Hrs

ITEM CRITICALITY NUMBER \*1.E-6 (Cr):  
 1: 10.0000  
 2: 640.0000  
 3: 450.0000  
 4 & Higher:

SHEET: 1

MODULE: Flashlight

REF DES: 1

Part # FL164578-1

DATE: 8 Nov 2006

FUNCTION: Flashlight

PHASE: Normal Operation

RD	DESCRIPTION	FMI	FAILURE RATE / MILLION HRS	F.M. RATIO	FAILURE MODE	LOCAL EFFECTS	NEXT HIGHER EFFECTS	END EFFECTS	COMPENSATING PROVISIONS	SEV CLASS	FAIL EFFECT PROB.	FAILMODE CRIT.# *1E-6
A1	Flashlight bulb	FAAA	50.000000	0.10000	dim light		flashlight output dim	flashlight output dim		3	1.0000	50.0000
		FAAB	50.000000	0.90000	no light		no flashlight output	no flashlight output		2	1.0000	450.0000
A2	Flashlight Switch	FAAA	10.000000	0.30000	intermittent		flashlight sometimes will not turn on	flashlight sometimes will not turn on		3	1.0000	30.0000
		FAAB	10.000000	0.10000	Stuck closed		constant flashlight output	constant flashlight output		1	1.0000	10.0000
		FAAC	10.000000	0.60000	Stuck open		no flashlight output	no flashlight output		2	1.0000	60.0000
A3	Flashlight Contact	FAAA	10.000000	0.20000	intermittent		flashlight sometimes will not turn on	flashlight sometimes will not turn on		3	1.0000	20.0000
		FAAB	10.000000	0.30000	no contact		no flashlight output	no flashlight output		2	1.0000	30.0000
		FAAC	10.000000	0.50000	poor contact		flashlight output dim	flashlight output dim		3	1.0000	50.0000
A4	Flashlight Battery	FAAA	40.000000	0.75000	low power		flashlight output dim	flashlight output dim		3	1.0000	300.0000
		FAAB	40.000000	0.25000	no power		no flashlight output	no flashlight output		2	1.0000	100.0000