

ED & EDM Series



Description

The ED keyswitches are self-cleaning, short travel sealed tact switches commonly found in panels and various forms of instrumentation. Known for providing great tactile feedback, the ED series is available in three actuation forces and is compliant with RoHS regulations. Throughout the aerospace industry, the EDM sealed tact keyswitches are used in a variety of instrument panels, giving users a high-performance, long-lasting switch with great tactile feedback. EDM keyswitches are built for short travel and are self-cleaning, with three actuation forces available.

Features & Benefits

- Short travel
- Self cleaning
- Good tactile feedback
- 3 actuation forces

Applications

- Aircraft
- Panels
- Instrument
- Radio equipment

Specifications

ED	Disc Element
EDM	Disc Element and double dome
Function	Momentary action
Contact Type	Normally open - SPST
Terminals	Through hole PCB terminations or Tabs
Operating Life	1,000,000 cycles
Packaging	Trays 50 pieces

Electrical Characteristics

	Silver	Gold
Max. Power	1 VA	0.2 VA
Min./Max. Voltage	20 mVDC - 100 VDC	
Min./Max. Current	1 mA to 100 mA	50µA to 50 mA
Dielectric Strength	≥ 250 Vrms	
Contact Resistance	≤ 100 mΩ	
Insulation Resistance	Initial measurement ≥ 1 GΩ After damp heat ≥ 10 MΩ	
Bounce Time	≤ 3 ms	

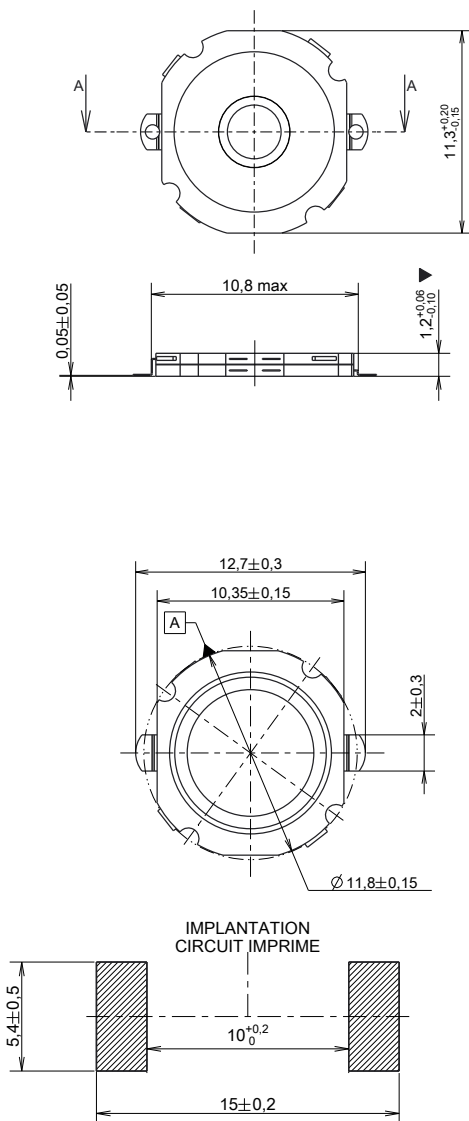
Environmental Characteristics

Materials	Silver	Gold
Operating Temperature	-25°C to 70°C	-55°C to 85°C

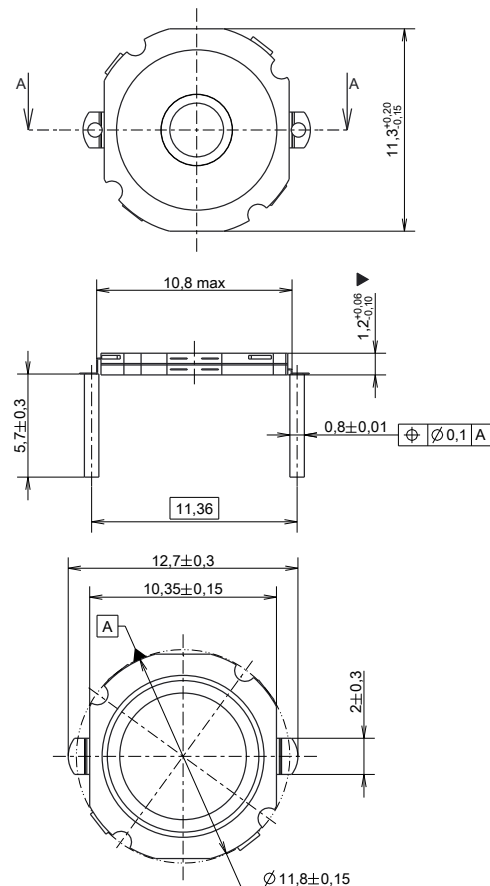
ED & EDM Series



ED/EDM SC



ED/EDM



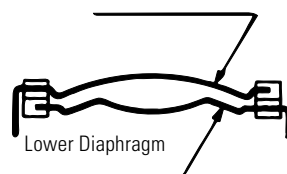
Switch Action Principal

The disc contact is essentially made of two separate conductive dome diaphragms separated by an insulated material.

The upper diaphragm is shaped so that under pressure it collapses suddenly and establishes contact with the lower diaphragm.

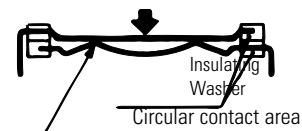
Switch in Resting Position

Upper Diaphragm



Switch in Active Position

Pressure

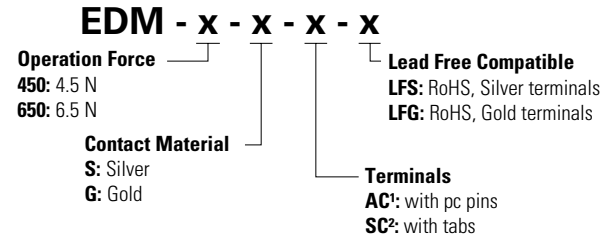
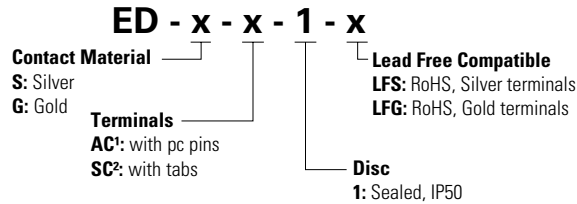


ED & EDM Series



Ordering Number

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.



Notes:

1. AC terminals only available with LFS
2. SC terminals available with LFS or LFG

Mechanical Characteristics

ED, Disc Element

Supply Status	LITTELFUSE Orderable Part Number	Description	Contact Plating	Terminals Plating	Terminals	Operating Force Fa (Newtons)	Tactile ratio (Min)	Return Force (Newtons)	Operating Life (Operations)	Electrical Travel (mm)	Simultaneity (mm)
✓	Y42A00000FPLFS	EDSSC0 LFS	Silver	Silver	with tabs	2.4 ± 25%	≥30%	≥ 0.4	1,000,000	0.3 ± 0.15	≤ 0.05
✓	Y42A00003FPLFS	EDSAC0 LFS	Silver	Silver	with pc pins	2.4 ± 25%	≥30%	≥ 0.4	1,000,000	0.3 ± 0.15	≤ 0.05
✓	Y42A00100FPLFG	EDGSC0 LFG	Gold	Gold	with tabs	2.4 ± 25%	≥30%	≥ 0.4	1,000,000	0.3 ± 0.15	≤ 0.05
✓	Y42A00103FPLFS	EDGAC0 LFS	Gold	Silver	with pc pins	2.4 ± 25%	≥30%	≥ 0.4	1,000,000	0.3 ± 0.15	≤ 0.05
✓	Y42A01000FPLFS	EDSSC1 LFS	Silver	Silver	with tabs	2.4 ± 25%	≥30%	≥ 0.4	1,000,000	0.3 ± 0.15	≤ 0.05
✓	Y42A01003FPLFS	EDSAC1 LFS	Silver	Silver	with pc pins	2.4 ± 25%	≥30%	≥ 0.4	1,000,000	0.3 ± 0.15	≤ 0.05
✓	Y42A01100FPLFG	EDGSC1 LFG	Gold	Gold	with tabs	2.4 ± 25%	≥30%	≥ 0.4	1,000,000	0.3 ± 0.15	≤ 0.05
✓	Y42A01103FPLFS	EDGAC1 LFS	Gold	Silver	with pc pins	2.4 ± 25%	≥30%	≥ 0.4	1,000,000	0.3 ± 0.15	≤ 0.05

EDM, Disc Element and double dome

Supply Status	LITTELFUSE Orderable Part Number	Description	Contact Plating	Terminals Plating	Terminals	Operating Force Fa (Newtons)	Tactile ratio (Min)	Return Force (Newtons)	Operating Life (Operations)	Electrical Travel (mm)	Simultaneity (mm)
✓	EDM450AGAC0LFS	EDM 450 S AC LFS	Silver	Silver	with pc pins	4.5 ± 25%	≥25%	≥ 1	1,000,000	0.5 ± 0.25	≤ 0.05
✓	EDM450AGSC0LFS	EDM 450 S SC LFS	Silver	Silver	with tabs	4.5 ± 25%	≥25%	≥ 1	1,000,000	0.5 ± 0.25	≤ 0.05
✓	EDM450AUAC0LFS	EDM 450 G AC LFS	Gold	Silver	with pc pins	4.5 ± 25%	≥25%	≥ 1	1,000,000	0.5 ± 0.25	≤ 0.05
✓	EDM450AUSC0LFG	EDM 450 G SC LFG	Gold	Gold	with tabs	4.5 ± 25%	≥25%	≥ 1	1,000,000	0.5 ± 0.25	≤ 0.05
✓	EDM650AGAC0LFS	EDM 650 S AC LFS	Silver	Silver	with pc pins	6.5 ± 25%	≥25%	≥ 1.6	1,000,000	0.6 ± 0.25	≤ 0.05
✓	EDM650AGSC0LFS	EDM 650 S SC LFS	Silver	Silver	with tabs	6.5 ± 25%	≥25%	≥ 1.6	1,000,000	0.6 ± 0.25	≤ 0.05
✓	EDM650AUAC0LFS	EDM 650 G AC LFS	Gold	Silver	with pc pins	6.5 ± 25%	≥25%	≥ 1.6	1,000,000	0.6 ± 0.25	≤ 0.05

Notes: Supply status: ✓ : Available for ordering.

Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <http://www.littelfuse.com/disclaimer-electronics>.