

## SPARK

## Battery Passivator

- Battery disconnection and loading
- High current, high efficiency design
- Best-in-class on size and mass metric
- Availability off the shelf



- Radiation TID immune disconnection
- Manufactured to IPC3
- Single-failure tolerant design
- Design & testing based on ECSS

### Performance

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Current rating	50 A
ON resistance	< 2 mΩ
Quiescent power	< 10 mW @ 28 V
Dissipative power	> 5 W

### Interface

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Electrical interface	4-pin Datamate Power
Supply voltage	6-pin CMM (MIL-DTL-55302F)
Voltage range	22 V – 34 VDC
Control interface	0 V – 5 V (discrete ARM then FIRE)
Mechanical interface	4 x M3 fasteners
Size	48 mm x 48 mm x 12 mm
Mass	< 45 g

### Environmental

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Temperature range	-30 °C to +60 °C operational -40 °C to +70 °C non-operational
Radiation	TID > 30 krad, TID immune for maintenance
Random vibration	14.1 g <sub>rms</sub>
Shock	SRS 1000 g (ECSS-E-ST-10-03C)

### Customization

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Electrical interface	Flying leads, custom connector
Dissipative power	0 ... 5 W
Control interface	0 V – 3 V (discrete)
Analysis	PSA, WCA, FIT, Structural