Other Devices

This section contains all devices that cannot be classified in other product sections of the catalog.

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1ATG99 Air Turbine Generator

The 1ATG99 Air Turbine Generator is a compact 19V DC generator powered by forced air

Characteristics

Some of the characteristics listed here are nominal; others are levels to which the units have been tested. There are no limits on design capabilities. Please consult an EaglePicher representative before using this data as a specification.

Specifications

Electrical	
Voltage Output	19V DC
Mechanical	
Size	See Drawing
Case	Delrin
Turbine	Delrin
Environmental	
Vibration	MIL-STD-810B, Method 514.1 Procedure 11, parts 1 (H) and 3 (AH) Fig 514.1-4
Mechanical Shock	MIL-STD-810B, Method 516.1 amplitude (a), duration (c) per fig. 516.1
Thermal Shock	MIL-STD-331A, Test 113.1

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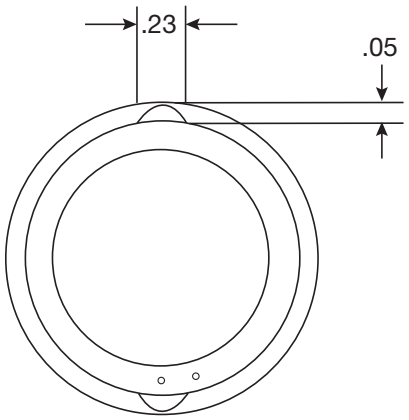
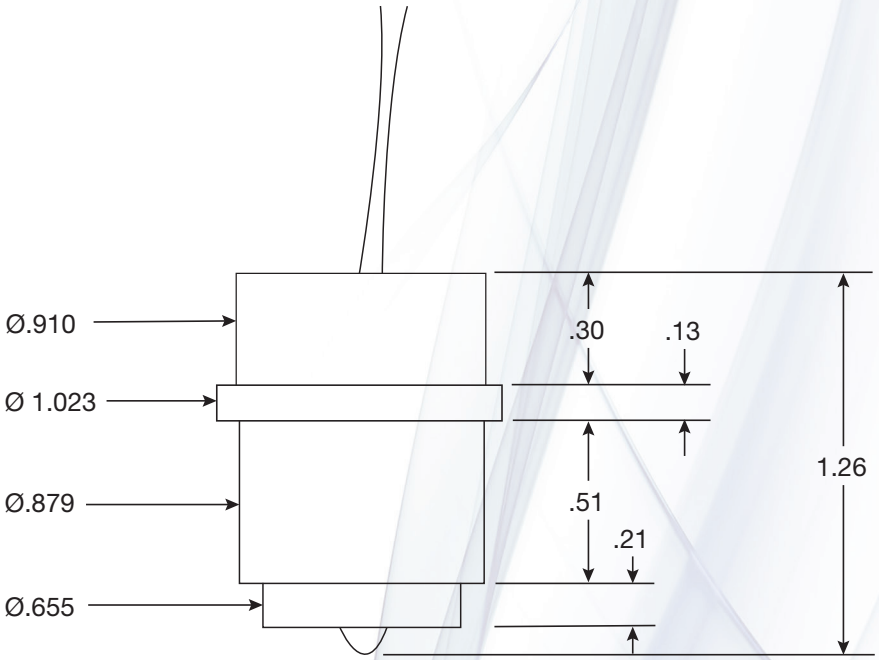
1ATG99





DIMENSIONS ARE NOMINAL

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EP-405X Lanyard Start Assembly

The EP-4051, EP-4052, and EP-4053 Lanyard Start Assemblies are manually activated current source devices.

A thermal battery with "sea-sense" capability is primer activated upon the release of a firing pin.

Variations

Electrical interface can be tailored to specific applications. MIL-DTL-38999 Series II class Y is standard.

Characteristics

Some of the characteristics listed here are nominal; others are levels to which the units have been tested. There are no limits on design capabilities. Please consult an EaglePicher representative before using this data as a specification.

Specifications

Electrical	
Current Output	3.8 amperes (minimum)
Risetime	150 msec (maximum)
Lifetime	30 msec (minimum)
Resistive Load	2.1 ± 0.1 Ω
Sea Sense	1.4K Ω (maximum)
Mechanical	
Size	See Drawing
Case	Anodized aluminum alloy
Hermetic Seal	5 x 10^{-3} std. cc/sec maximum
Lead	0.030" diameter
Caloric Output	20 calories nominal

Specifications Continued

Environmental	
Temperature	Operating Range: -22°F to +130°F (-30°C to +54°C) Storage Range: -40°F to +140°F (-40°C to +60°C)
Temperature Shock	One cycle of +130°F to +28°F to +20°F to +94°F
Shock	60-400 G at 1-50 msec duration
Vibration	Narrow Band Sine; 6-500-6 Hz Broad Band Sine; 6-2000-6 Hz Sine Dwell; 11-44 Hz Random; 15-2000 Hz
Internal Pressure	2.7 psia - 64.7 psia
External Pressure	High; Hydrostatic pressure 2500 psig Low; Hydrostatic pressure 3 psig
Temperature Humidity	95% rel. humidity @ 140°F
Salt Fog	Per MIL-STD-810C, Method 509.1, Procedure 1
Sand & Dust	Per MIL-STD-810C, Method 510.1, Procedure 1 Mod.
Acceleration	20-50g
Chemical	
Thermal Battery	LiAl/FeS_2
Freight Classification	
Shipping Name	Lanyard Start Assembly
Identification Number	Not regulated as Class 1
Hazard Classification	Not regulated as Class 1

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EP-405X

Safety

Warning:
The igniter may fire if exposed to temperatures above 350°F (176°C), an electrical charge exceeding the specified no-fire current, or if it is cut open before functioning. When the unit fires, hot gases are discharged through the output end.

If your company does not have a safety program, it is essential that one is established before explosive items are handled or used. For a brief overview of safety precautions, see the Safety Procedures Data Sheet or contact an EaglePicher representative.

Energetic devices are considered articles; therefore a Material Safety Data Sheet (MSDS) does not apply. However, MSDS may apply to individual components. For more information, contact your EaglePicher representative.

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CAP-12271
Power Module

EaglePicher qualified the CAP-12271 to CAD/PAD Joint Program Office NACES requirements for the MXU-792A/A Battery Pack, MIL-DTL-82909, and is deemed a qualified source of supply.

Functional Description

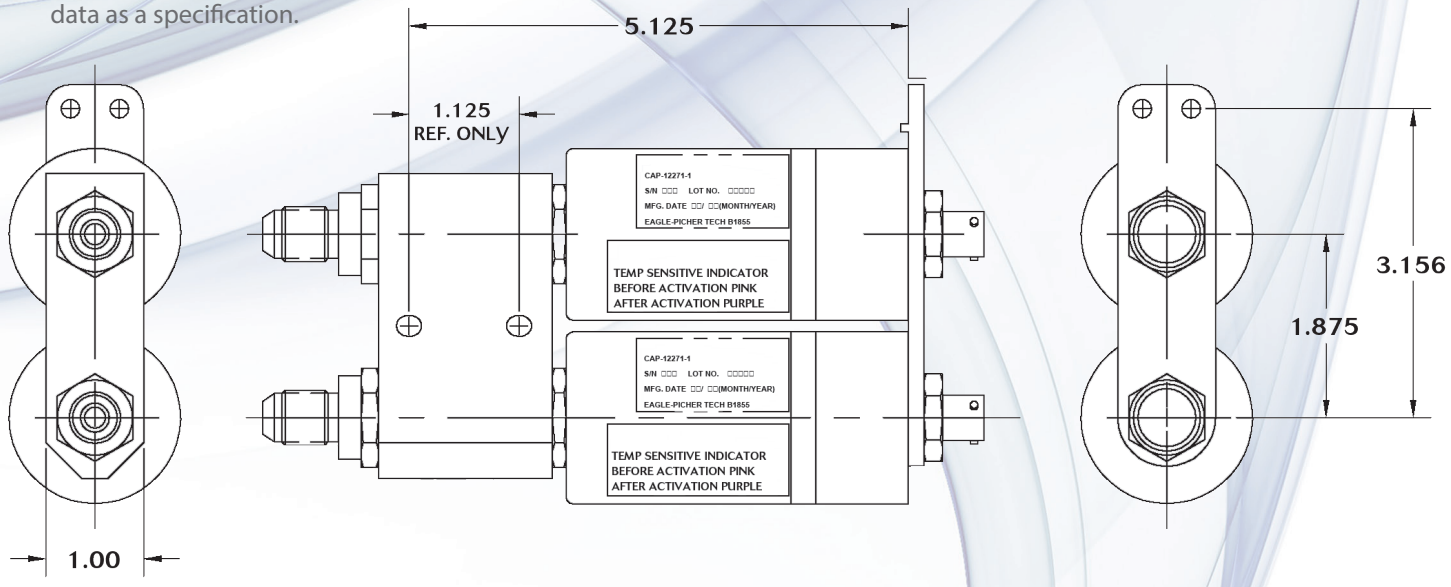
The CAP-12271 Power Module is comprised of a manifold with two internal firing mechanisms that activate two thermal batteries. The power module is activated by pneumatic pressure which drives a firing pin into each thermal battery's primer. Once activated, the thermal batteries provide power to the NACES ejection seat's Digital Recovery Sequencer. Before activation, a temperature sensitive indicator stripe on each thermal battery will be pink, upon activation the indicator stripes will turn purple.

Specifications

Part Number	CAP-12271
NSN	6135-01-393-4746
Operational Environments	-65°F to 200°F
Activation Pressure	400 to 650 psi at an onset rate of 20,000 to 40,000 psig/sec of air pressure
Battery Output Voltage	22 volts minimum/60 volts maximum
Battery Operational Life	225 seconds

Characteristics

Some of the characteristics listed here are nominal; others are levels to which the units have been tested. Please consult an EaglePicher representative before using this data as a specification.



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EP-4054
Power Module

EaglePicher qualified the EP-4054 to CAD/PAD Joint Program Office ACES II requirements for the JN25 Power Module and is deemed a qualified source of supply.

Functional Description

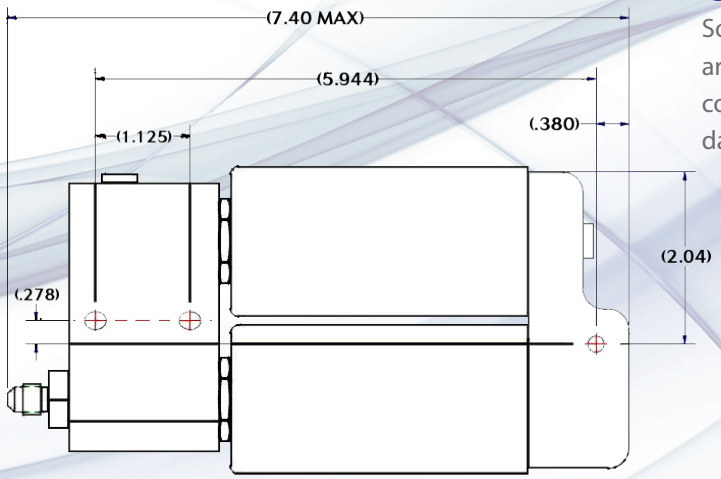
The EP-4054 Power Module is comprised of a manifold with two internal firing mechanisms that activate two thermal batteries. The power module is activated by pneumatic pressure which drives a firing pin into each thermal battery's primer. Once activated, the thermal batteries provide power to the ACES II ejection seat's Digital Recovery Sequencer. Before activation, a temperature sensitive indicator stripe on each thermal battery will be pink and upon activation the indicator stripes will turn purple.

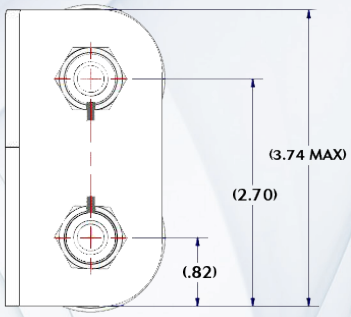
Specifications

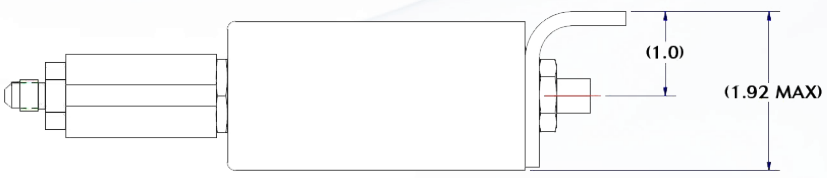
Part Number	EP-4054
NSN	1377-01-625-4503ES
Operational Environments	-40°F to 160°F
Activation Pressure	400 to 650 psi at an onset rate of 20,000 to 40,000 psig/sec of air pressure
Battery Rise Time	22 volts within 80 ms at -40°F and 160°F
Battery Output Voltage	22 volts minimum/60 volts maximum
Battery Operational Life	300 seconds

Characteristics

Some of the characteristics listed here are nominal; others are levels to which the EP-4054 has been tested. Please consult an EaglePicher representative before using this data as a specification.







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