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Operating Manual Electronic Fuse

1 Features

With a response time as low as $5\mu\text{s}$, this electronic fuse can provide current limiting and fault protection for electronic circuits, especially in development, research or laboratory environments, where the circuitry being tested may not yet have protection circuitry incorporated.

- Adjustable current limit: 0 – 8 A
- Adjustable response time: $10\mu\text{s}$ to 2 ms
- Active current limiting removes harsh fault conditions

This product is *not* intended as a replacement for agency-approved electrical and fire protection components.

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2 Absolute Maximum Ratings

Symbol	Description	Comments	Min.	Max.	Unit
$V_{T(max)}$	Terminal Voltage		-0.3	48	V
$I_{T(max)}$	Terminal Current, DC		-8	8	A
$I_{T(pk,max)}$	Peak Current	Pulse width < 20 μs	-100	100	A
$I_{T(pp)}$	Peak Current in Breakdown	10/1000 μs surge		38.8	A
$V_{cc(max)}$	Maximum Supply (Battery) Voltage [1]		-100	12.6	V
T_a	Operating Ambient Temperature		-40	100	$^{\circ}C$
T_s	Storage Temperature		-40	125	$^{\circ}C$

[1] Reverse voltage protected.

3 Characteristics

Operating Conditions

Symbol	Description	Value	Unit
V_{cc}	Supply Voltage	9	V
T_a	Ambient Temperature	25	$^{\circ}C$

Symbol	Description	Comments	Min.	Typ.	Max.	Unit
I_{cc}	Supply Current Consumption			183		μA
R_{on}	On Resistance			69	81	m Ω