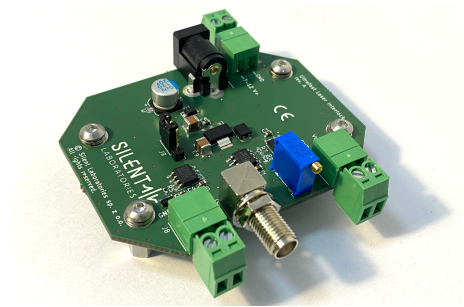


## Overview

CTR-ILK-I5T is a fast analog signal comparator dedicated specifically to interlocking applications.

- 50  $\Omega$  SMA input
- TTL output (open drain) with optional internal pull-up to 5 V.
- Response time < 80 ns.
- Unipolar rail-to-rail input and reference from 0V to 5 V .
- Precision trimpot-adjusted internal reference.
- Wide operating supply voltage range 7 - 15 V.
- Low drift, low noise design.
- Externally accessible latch function



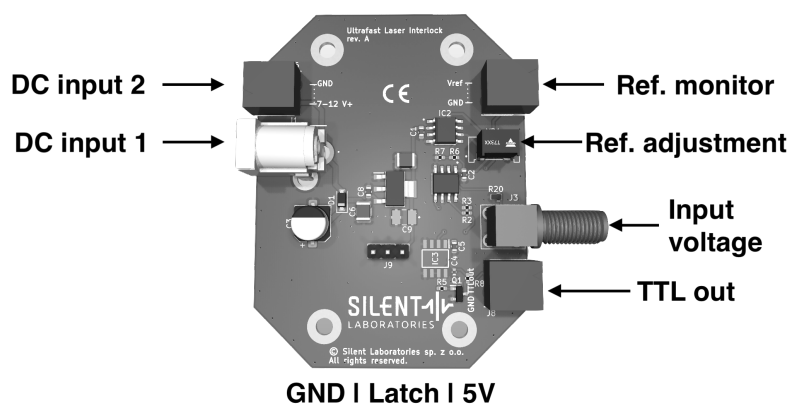
## 1 Specifications

### 1.1 Absolute maximum ratings

	Maximum	Unit
<b>DC input (any connector)</b>	18	[V]
<b>Input signal</b>	5.3	[V]
<b>TTL pull-up voltage</b>	60	[V]
<b>TTL sink current</b>	265	[mA]

### 1.2 Characteristics

	Minimum	Typical	Maximum	Unit
<b>DC input (any connector)</b>	7	-	15	[V]
<b>Input signal</b>	0.0	-	5.0	[V]
<b>TTL pull-up voltage</b>	0.0	-	30	[V]
<b>TTL sink current</b>	0.0	-	150	[mA]
<b>Input offset voltage</b>	-	1	7	[mV]
<b>Input offset drift</b>	-	4	-	[ $\mu$ V/°C]
<b>Reference voltage floor</b>	-	-	50	[mV]
<b>Reference voltage range</b>	floor	-	5.015	[V]
<b>Reference temperature coefficient</b>	-	$\pm 60$	$\pm 165$	[ppm/°C]
<b>PSRR</b>	105	130	-	[dB]
<b>Operating temperature</b>	-20	+21	+50	[°C]



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