

# Template:MTB100 Electrical characteristics

## Electrical characteristics

Characteristic description	Value		
	Min.	Typ.	Max. Unit
Supply Voltage:			
Supply Voltage (Recommended Operating Conditions)	6	30	V
Digital Output (Open Drain grade):			
Drain current (Digital Output OFF)		120	µA
Drain current (Digital Output ON, Recommended Operating Conditions)	0.1	0.5	mA
Static Drain-Source resistance (Digital Output ON)		300	mΩ
Digital Input:			
Input resistance (DIN1)	47		kΩ
Input voltage (Recommended Operating Conditions)	0	Supply voltage	V
Input Voltage threshold (DIN1)		2.5	V
Analog Input:			
Input voltage (Recommended Operating Conditions)	0	30	V
Input resistance		150	kΩ
Measurement error on 12 V		3	%
Additional error on 12 V		360	mV
Measurement error on 30 V		3	%
Additional error on 30 V		900	mV

**✘ Analog Input error margin can increase if temperature varies.**

## Absolute maximum ratings

Characteristic description	Value		
	Min.	Typ.	Max. Unit
Supply Voltage (Absolute Maximum Ratings)	-32	+32	V
Drain-Source clamp threshold voltage (Absolute Maximum Ratings), ( $I_{\text{drain}} = 2 \text{ mA}$ )		+36	V

Digital Input Voltage (Absolute Maximum Ratings)	-32	+32 V
Analog Input Voltage (Absolute Maximum Ratings)	-32	+32 V