

# Template:FMB2 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	A
Static Drain-Source resistance (Digital Output ON)			120	mΩ
Digital Input:				
Input resistance (DIN1)		59.9		kΩ
Input resistance (DIN2, DIN3)		67.5		kΩ
Input voltage (Recommended Operating Conditions)	0		60	V
Input Voltage threshold (DIN1)	4	4	8	V
Input Voltage threshold (DIN2, DIN3)	2.5	2.7	3	V
Analog Input:				
Input voltage (Recommended Operating Conditions), Range 1	0		10	V
Input resistance, Range 1		120		kΩ
Input voltage (Recommended Operating Conditions), Range 2	0		30	V
Input resistance, Range 2		146.7		kΩ
Output Supply Voltage 1-Wire:				
Supply voltage		3.8		V
Output inner resistance	450		600	mΩ
Output current ( $U_{out} > 3.0$ V)			75	mA
Short circuit current ( $U_{out} = 0$ )			75	mA

**✘ 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