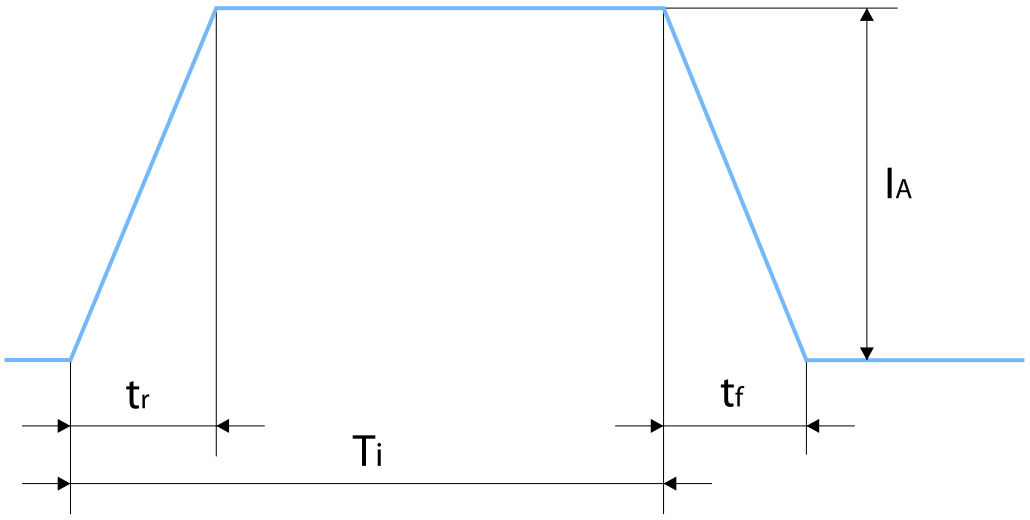
DATASHEET

Description

Electromagnetic display - flip disc - it is a passive technology, because it only needs a short current pulse to flip the disc. The disc remains in the set position without any other energy needed.

Operation Condition

Operation Temperature	-40°C to +80°C
Storing Temperature	-50°C to +85°C
Humidity	max. 95% for +40°C, non-condensing, air pressure min. 70kPa
Mounting	20° counter clockwise 10° clockwise from vertical position



current mode pulse (**recommended**)

Current mode timing characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Pulse duration	Ti		0.8		2	ms
Rise time	tr		0		0.4	ms
Fall time	tf		0		0.4	ms
Excitation current	I_A		300		600	mA
Single disc recommended pulse		at Ti = 1ms		350 - 400		mA

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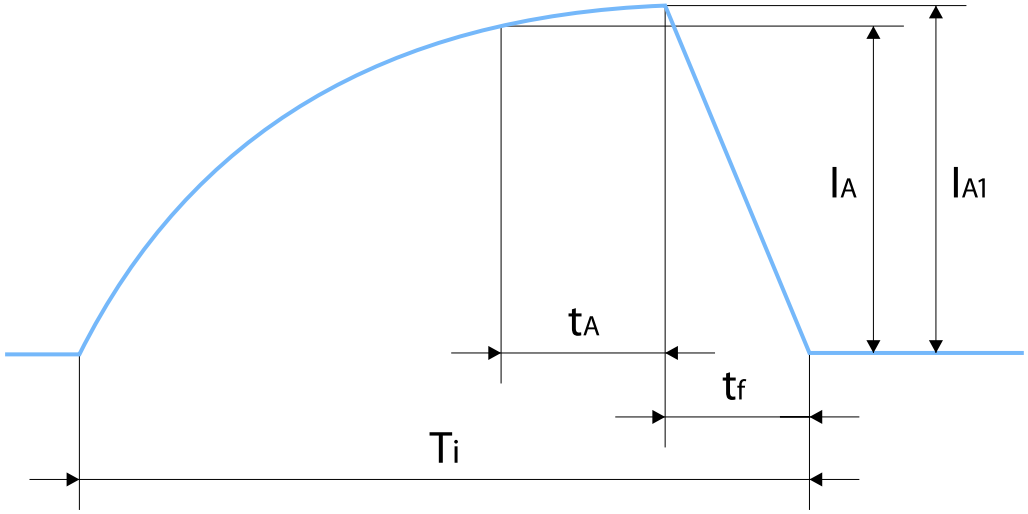

voltage mode pulse

Voltage mode timing characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Pulse duration	T_i		0.8		2	ms
Time above min. excitation	t_A	$I > I_A$	0.2			ms
Fall time	t_f		0		0.4	ms
Minimum excitation current	I_A		300			mA
Maximum excitation current	I_{A1}				800	mA

Winding characteristics

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Resistance (Note 1)	R_{SER}	Ta=20°C	16.2	18	19.8	Ω
Temperature coefficient	TCR			0.004		deg
Inductance (Note 1)	L_{SER}			6		mH
Power dissipation at low temp	P_{W1}	Ta <-40 to 20>°C			0.6	W
Power dissipation at high temp	P_{W2}	Ta = 80°C			0.3	W

(Note 1): Current timing model is given by serial combination of R_{SER} and L_{SER}.

Flip disc characteristics

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Flip time	t_{FTS}	I=350mA, Ti=1ms, current mode		100		ms
Mechanical endurance	t_{FTU}			$200x10^6$		cycles