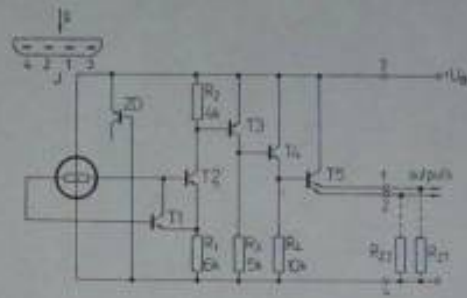
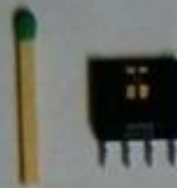


Hall-IC MH1SS1

MONOLITHIC INTEGRATED CIRCUIT FOR CONTACTLESS SWITCHES WITH MAGNETIC FIELD CONTROL
 MONOLITHISCHER INTEGRIERTER SCHALTKREIS FÜR MAGNETISCH BETÄTIGTE KONTAKTLOSE SCHALTER

MH1SS1

Maximum ratings:	Grenzwerte:				
Supply voltage	Speisespannung	U_{D14}	5 ± 0.1	V	
Output current	Ausgangsstrom	I_{L14}	max 10	mA	
		I_{L14}	max 10	mA	
Output current with parallel connected outputs	Ausgangsstrom mit parallelgekoppelten Ausgängen	$I_{L14} \parallel I_{L21}$	max 20	mA	
Operating temperature range	Umgebungstemperaturbereich	T_a	max 0 ... +55	°C	
Storage temperature range	Lagertemperaturbereich	T_{H2}	max -55 ... +55	°C	



CHARACTERISTIC DATA: KENNDATEN: $T_a = 25^\circ\text{C}$

Output voltage - L level	Ausgangsspannung - L-Zustand	U_{L14}	< 0.25	V
$U_{D14} = 5 \pm 0.01 \text{ V}, R_L = 2.5 \text{ k}\Omega$		U_{L14}	< 0.25	V
Output voltage - H level	Ausgangsspannung - H-Zustand	U_{H14}	- 3.15	V
$U_{D14} = 5 \pm 0.01 \text{ V}, I_L = 1 \dots 10 \text{ mA}$		U_{H14}	- 3.15	V
Magnetic induction - H level	Magnetische Induktion - H-Zustand	B	0.01 ... 0.08	T
$U_{D14} = 5 \pm 0.01 \text{ V}, I_{L1} = I_{L2} = 1 \dots 10 \text{ mA}$		B	< 0.015	T
Magnetic induction - L level	Magnetische Induktion - L-Zustand	B	< 0.015	T
$U_{D14} = 5 \pm 0.01 \text{ V}, R_{L1} = R_{L2} = 2.5 \text{ k}\Omega$		A B	< 0.015	T
Magnetic hysteresis	Magnetische Hysterese	A B	< 0.015	T
$U_{D14} = 5 \pm 0.01 \text{ V}, I_{L1} = I_{L2} = 1 \dots 10 \text{ mA}$		I_{L22}	- 1	mA
Insulatory output current	Ausgang-Isolationsstrom	I_{O1}	- 1	mA
$U_{D14} = 5 \text{ V}$		t_r	< 0.5	μs
Switching time - rise time	Schaltzeit - Anstiegszeit	t_f	< 10	μs
$U_{D14} = 5 \pm 0.01 \text{ V}, I_{L1} = I_{L2} = 1 \dots 10 \text{ mA}$		I_{L14}	- 15	mA
Switching time - fall time	Schaltzeit - Abfallzeit			
$U_{D14} = 5 \pm 0.01 \text{ V}, I_{L1} = I_{L2} = 1 \dots 10 \text{ mA}$				
Supply current - H level	Speisestrom - H-Zustand			
$U_{D14} = 5 \pm 0.01 \text{ V}, R_{L1} = R_{L2} = 2.5 \text{ k}\Omega$				

