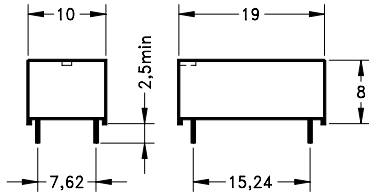
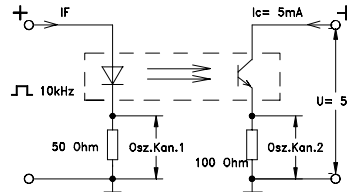


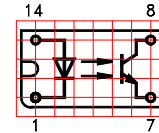
**Dimensions (mm)**



**Test circuit**

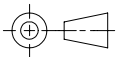


**Layout / Pitch** 2,54 mm / Top View



**Marking**

MEDER-Label  
 Type  
 Prod.-Code-  
 EN60062  
 /Factory Code  
**PTB 01 ATEX**  
**2049 U**  
**0344** II (1) G  
**[EEx ia] IIC**



Pins:  $\varnothing 0,65$  mm / L 3,2 +0,8 -0,3 mm

Electrical Characteristics	Conditions (at $T_A = 25^\circ\text{C}$ )	Symbol	Min.	Typ.	Max.	Units
<b>Isolation Voltage Input / Output</b>		$V_{IO}$	4.000			VDC
Insulation Resistance Input / Output	RH 45%	$R_{IO}$	$10^{12}$			$\Omega$
Coupling Capacitance		$C_C$		0,4		pF
Collector-Emitter Saturation Voltage	$I_F = 10$ mA, $I_C = 1$ mA	$V_{CEsat}$		0,3		V
Collector Dark Current	$U_{CE} = 20$ V, $R = 1$ M $\Omega$ , $I_F = 0$ mA	$I_{CEO}$			0,2	$\mu\text{A}$
Cut-Off Frequency	$I_F = 10$ mA, $U_{CE} = 5$ V, $R_L = 100$ $\Omega$	$F_{CO}$		50		kHz
<b>Current Transfer Ratio <math>I_C / I_F</math></b>	$I_F = 10$ mA	CTR	0,5	0,8		

Coupled Device					
Creeping Distance			14,5		mm
Air Path Input / Output			14,5		mm
Insulation through Thickness			5		mm

Switching Time					
Turn-on Time	$I_F = 10$ mA, $U_{CE} = 5$ V, $R_L = 100$ $\Omega$	$T_{on}$		5,5	$\mu\text{s}$
Turn-off Time	$I_F = 10$ mA, $U_{CE} = 5$ V, $R_L = 100$ $\Omega$	$T_{off}$		4,2	$\mu\text{s}$

Maximum Ratings Emitter					
Reverse Voltage		$V_R$		5	V
DC Forward Current		$I_F$		100	mA
Surge Forward Current	$t \leq 10$ $\mu\text{s}$	$I_{FS}$		500	mA
Power Dissipation		$P_{TOT}$		170	mW
Forward Voltage		$V_F$		1,5	V
Current Reduction			0,73		$\text{mA}/^\circ\text{C}$

Maximum Ratings Detector					
Collector-Emitter Voltage		$V_{CE}$	32		V
Emitter-Collector Voltage		$V_{EC}$	5		V
Collector Current		$I_C$		50	mA
Collector Peak Current	$t \leq 10$ ms	$I_{CM}$		100	mA
Power Dissipation		$P_{TOT}$		100	mW
Power Reduction			0,91		$\text{mW}/^\circ\text{C}$

Environmental Data					
Ambient Temperatur Range		$T_A$	- 40	+ 85	$^\circ\text{C}$
Storage Temperatur Range		$T_{stg}$	- 40	+ 100	$^\circ\text{C}$
Soldering Temperature	5 sec. at			260	$^\circ\text{C}$
Cleaning				fully sealed	
Material of Case				Plastics	
Sealing Compound				Polyurethan	
Material of Pins				Cu-alloy tinned	
Remarks	Optocoupler approved according to PTB 01 ATEX 2049 U.				

Customer / Customer part number	Standard Part
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