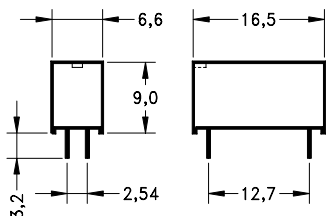
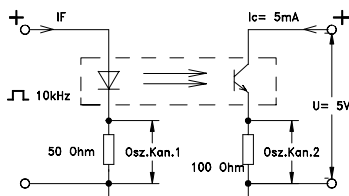


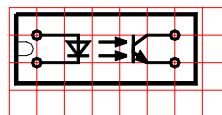
Dimensions (mm)



Test circuit

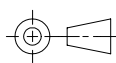


Layout / Pitch 2,54 mm / Top View



Marking

MEDER-Label
 Type
 Prod.-Code-
 EN60062
 /Factory Code
**PTB 01 ATEX
 2043 U**
0344 II (1) G
[Ex 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
Isolation Voltage Input / Output		V_{IO}	4.000			VDC
Insulation Resistance Input / Output	RH 45%	R_{IO}	10^{12}			Ω
Coupling Capacitance		C_C		0,4		pF
Collector-Emitter Saturation Voltage	$I_F = 10 \text{ mA}, I_C = 1 \text{ mA}$	V_{CEsat}		0,3		V
Collector Dark Current	$U_{CE} = 20 \text{ V}, R = 1 \text{ M}\Omega, I_F = 0 \text{ mA}$	I_{CEO}			0,2	μA
Cut-Off Frequency	$I_F = 10 \text{ mA}, U_{CE} = 5 \text{ V}, R_L = 100 \Omega$	F_{CO}		50		kHz
Current Transfer Ratio I_C / I_F	$I_F = 10 \text{ mA}$	CTR	0,5	0,8		

Coupled Device					
Creeping Distance			12		mm
Air Path Input / Output			12		mm
Insulation through Thickness			2		mm

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

Maximum Ratings Emitter					
Reverse Voltage		V_R			5 V
DC Forward Current		I_F			75 mA
Surge Forward Current	$t \leq 10 \mu\text{s}$	I_{FS}			500 mA
Power Dissipation		P_{TOT}			100 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	$t \leq 10 \text{ ms}$	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_{slg}	- 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 2043 U.				

Customer / Customer part number	Standard Part
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