



Products for tomorrow...

Headquarter Europe
MEDER electronic AG
Friedrich-List Strasse 6
D-78234 Engen-Welschingen
Tel.: +49(0)7733-9487-0
Fax: +49(0)7733-9487-32
eMail: info@meder.com
Internet: www.meder.com

Headquarter USA
MEDER electronic Inc.
766 Falmouth Rd
Mashpee, MA 02649
Phone: +1/ 508-539-0002
Fax: +1/ 508-539-4088
eMail: salesusa@meder.com

Optocoupler: 525-03-0-i

Part Number: 5217103000

<p>Dimensions (mm)</p> <p>Pins: \varnothing 0,65 mm / L 3,2 +0,8 -0,3 mm</p>	<p>Test circuit</p>	<p>Layout / Pitch 2,54 mm / Top View</p> <p>Marking</p> <p>MEDER-Label Type Prod.-Code- EN60062 /Factory Code PTB 01 ATEX 2049 U</p> <p>0344 II (1) G [EEx ia] IIC</p>
--	----------------------------	--

Electrical Characteristics	Conditions (at T _A = 25°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
Kollektor-Emitter Saturation Voltage	I _F 10 mA, I _C 1 mA	V _{CEsat}		0,3		V
Kollektor Dark Current	U _{CE} = 20 V, R _L = 1 MΩ, I _F = 0 mA	I _{CEO}			0,2	μA
Cut-Off Frequency	I _F =10 mA, U _{CE} =5 V, R _L =100 Ω	F _{CO}		50		kHz
Current Transfer Ratio I_C / I_F	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 Ω	T _{on}		5,5		μs
Turn-off Time	I _F =10 mA, U _{CE} =5 V, R _L =100 Ω	T _{off}		4,2		μs

Maximum Ratings Emitter						
Reverse Voltage		V _R			5	V
DC Forward Current		I _F			100	mA
Surge Forward Current	t ≤ 10 μs	I _{FS}			500	mA
Power Dissipation		P _{TOT}			170	mW
Forward Voltage		V _F			1,5	V
Current Reduction			0,73			mA/°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 ≤ 10 ms	I _{CM}			100	mA
Power Dissipation		P _{TOT}			100	mW
Power Reduction			0,91			mW/°C

Environmental Data						
Ambient Temperatur Range		T _A	- 40		+ 85	°C
Storage Temperatur Range		T _{stg}	- 40		+ 100	°C
Soldering Temperature	5 sec. at				260	°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
---------------------------------	---------------