



Products for tomorrow...

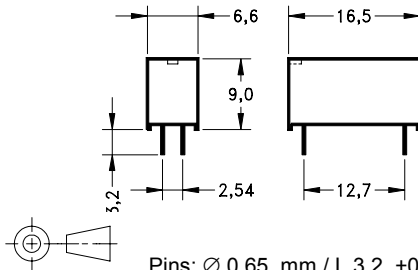
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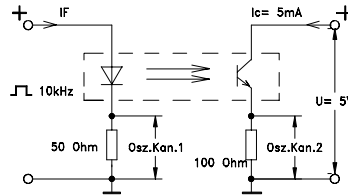
Optocoupler: 522-03-i

Part Number: 5252203000

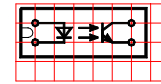
Dimensions (mm)



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
[EEx ia] IIC

| 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 |
| 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 _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 | | | 12 | | mm |
| Air Path Input / Output | | | 12 | | mm |
| Insulation through Thickness | | | 2 | | 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 | | | 75 mA |
| Surge Forward Current | t ≤ 10 μs | I _{FS} | | | 500 mA |
| Power Dissipation | | P _{TOT} | | | 100 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 2043 U. | | | | |

| | |
|---------------------------------|---------------|
| Customer / Customer part number | Standard Part |
|---------------------------------|---------------|