



Relays, Contactors & Switches > Relays > Signal Relays



Contact Voltage Rating: **220 VDC**

Signal Relay Coil Power Rating (DC): **100 mW**

Isolation (HF Parameter): **-18.8dB @ 900MHz, -37dB @ 100MHz**

Insertion Loss (HF Parameter): **-.03dB @ 100MHz, -.33dB @ 900MHz**

Features

Product Type Features

Relay Type	IM Relay
Product Type	Relay

Electrical Characteristics

Coil Power Rating Class	50 – 300 mW
Actuating System	DC
Insulation Initial Dielectric Between Open Contacts	750 Vrms
Contact Limiting Short-Time Current	5 A
Insulation Initial Dielectric Between Contacts and Coil	1500 Vrms
Insulation Initial Dielectric Between Coil/Contact Class	1500 V – 2500 VA
Voltage Standing Wave Ration (HF Parameter)	1.06 @ 100MHz, 1.49 @ 900Mhz
Insulation Initial Dielectric Between Adjacent Contacts	750 Vrms
Insulation Initial Resistance	1000000 MΩ
Contact Limiting Making Current	5 A
Coil Resistance	58 Ω
Contact Limiting Continuous Current	5 A



Coil Type	Bistable
Contact Limiting Breaking Current	5 A
Contact Switching Load (Min)	.1mA @ .0001V
Contact Voltage Rating	220 VDC
Signal Relay Coil Power Rating (DC)	100 mW
Signal Relay Coil Voltage Rating	2.4 VDC
Signal Relay Contact Switching Voltage (Max)	220 VDC
Signal Relay Coil Magnetic System	Bistable, 1 Coil

Signal Characteristics

Isolation (HF Parameter)	-18.8dB @ 900MHz, -37dB @ 100MHz
Insertion Loss (HF Parameter)	-.03dB @ 100MHz, -.33dB @ 900MHz

Body Features

Insulation Special Features	2000V Initial Surge Withstand Voltage Between Contacts & Coil
Weight	.75 g[.026 oz]

Contact Features

Contact Plating Material	Gold
Contact Current Class	0 – 5 A
Contact Special Features	Bifurcated/Twin Contacts
Signal Relay Terminal Type	PCB-SMT
Signal Relay Contact Current Rating	5 A
Signal Relay Contact Arrangement	2 Form C (2 CO)
Contact Material	AgNi+Au
Contact Number of Poles	2

Termination Features

Termination Type	Surface Mount
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Mechanical Attachment

Signal Relay Mounting Type	Printed Circuit Board
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Dimensions

Width Class (Mechanical)	0 – 6 mm
Width	6 mm[.236 in]
Height	5.65 mm[.222 in]



Length Class (Mechanical)	0 – 10 mm
Length	10 mm[.393 in]
Height Class (Mechanical)	0 – 6 mm
Dimensions (L x W x H) (Approximate)	10 x 6 x 5.65 mm[.393 x .236 x .222 in]

Usage Conditions

Environmental Ambient Temperature (Max)	85 °C[185 °F]
Environmental Ambient Temperature Class	70 – 85°C
Operating Temperature Range	-40 – 85 °C

Operation/Application

Performance Type	High Current
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Packaging Features

Packaging Method	Reel
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Other

Additional Features	Gull Wing
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Product Compliance

For compliance documentation, visit the product page on TE.com>

EU RoHS Directive 2011/65/EU	Compliant
EU ELV Directive 2000/53/EC	Compliant
China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2023 (235) Candidate List Declared Against: JUNE 2023 (235) Does not contain REACH SVHC
Halogen Content	Low Bromine/Chlorine - Br and Cl < 900 ppm per homogenous material. Also BFR /CFR/PVC Free
Solder Process Capability	Reflow solder capable to 260°C

Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits



as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) 'Guidance on requirements for substances in articles' posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

Compatible Parts

TE Part # CAT-AX41-IM11B
Standard Signal Relay 2 Form C,2 CO Cont

Also in the Series | Axicom IM

RJ45 Connectors(2)

Signal Relays(154)

Customers Also Bought

TE Part #1-215079-2
MICRO-MATCH FOB.12P

TE Part #2309413-1
DDR4 SODIMM 260P 9.2H STD

TE Part #1-640383-5
15P MTA156 HDR ASSY STR SQ SN

TE Part #531230-4
SHUNT,.200 C/L, 2 POS, SN

TE Part #1734300-1
SHIELD FINGER 3025-Z1-T

TE Part #1546073-4
4 POS 5.08MM TERMI-BLOK

TE Part #7-5530843-7
CONN SEC II 3 POS 100C/L

TE Part #2337243-4
TACT MINI JB 5.2X5.2X1.5 260GF



Documents

Product Drawings

IM48DGR=IM RELAY 100mW 2.4V BIS

English

IM48DGR=IM RELAY 100mW 2.4V BIS

English

CAD Files

Customer View Model

ENG_CVM_CVM_1462037-2_A.2d_dxf.zip

English

3D PDF

3D

Customer View Model

ENG_CVM_CVM_1462037-2_A.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_1462037-2_A.3d_stp.zip

English

Customer View Model

ENG_CVM_CVM_1462039-9_F.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_1462039-9_F.3d_stp.zip

English

Customer View Model

ENG_CVM_CVM_1462039-9_F.2d_dxf.zip

English

3D PDF

3D

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages

Axicom Signal and High Frequency Relays (RF Switches) APPLICATION NOTE #2

English

IM_Datasheet



English

Product Specifications

Definitions General Purpose Relays

English

Agency Approvals

VDE Certificate

English