



Power Relay F

TE Internal #: 3-1415001-2

Automotive Power Relay, DC, Monostable, 1 Form A (NO), 50 A

Contact Rating, 12 VDC Coil Voltage, 12 VDC Contact Voltage,

Power Relay F

[View on TE.com >](#)

Relays & Contactors > Electromechanical Relays

Relay & Contactor Type: **Automotive Power Relay**Coil Magnetic System: **Monostable**Contact Arrangement: **1 Form A (NO)**Current Type: **DC**Contact Current Rating: **50 A****Features****Product Type Features**

Relay & Contactor Type	Automotive Power Relay
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Configuration Features

Contact Arrangement	1 Form A (NO)
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Electrical Characteristics

Contact Limiting Short-Time Current	300 A
Contact Limiting Making Current	240 A
Contact Limiting Continuous Current	70 A
Contact Limiting Breaking Current	70 A
Insulation Initial Dielectric Between Open Contacts	500 Vrms
Contact Switching Load (Min)	1000mA @ 5VDC
Coil Resistance	90 Ω
Contact Current Rating	50 A
Coil Voltage Rating	12 VDC
Contact Voltage Rating	12 VDC
Coil Power Rating DC	1.6 W
Insulation Initial Dielectric Between Contacts & Coil	500 Vrms

Body Features

Product Weight	38 g[1.3 oz]
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Enclosure Type	Dust Protected
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Contact Features

Contact Material	Silver Alloy
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Termination Features

Main Termination & Connection Type	Solder Pins
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Coil Termination & Connection Type	Solder Pins
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Mechanical Attachment

Product Mount Type	Board Mount
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Dimensions

Product Width	25.9 mm[1.019 in]
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Product Length	25.9 mm[1.019 in]
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Product Height	24.9 mm[.98 in]
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Usage Conditions

Operating Temperature Range	-40 – 125 °C[-40 – 257 °F]
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Environmental Category of Protection	RTI
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Environmental Ambient Temperature (Max)	125 °C[257 °F]
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Operation/Application

Solder Process	Wave Solder Capable
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Coil Magnetic System	Monostable
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Current Type	DC
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Other

Coil Power Rating Class	>1.5 – ≤3 W
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Contact Current Class	>50 – ≤200 A
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Height Class (Mechanical)	>22 – ≤27 mm[>.866 – ≤1.063 in]
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Length Class (Mechanical)	>22 – ≤33 mm[>.866 – ≤1.299 in]
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Width Class (Mechanical)	>22 – ≤33 mm[>.866 – ≤1.299 in]
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Product Compliance

For compliance documentation, visit the product page on [TE.com](https://www.te.com)>

EU RoHS Directive 2011/65/EU	Compliant
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EU ELV Directive 2000/53/EC	Compliant
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China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
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EU REACH Regulation (EC) No. 1907/2006

Current ECHA Candidate List: JAN 2025 (247)

Candidate List Declared Against: JAN 2025 (247)

Does not contain REACH SVHC

Halogen Content

Low Halogen - Br, Cl, F < 900 ppm per homogenous material. Also BFR/CFR/PVC Free

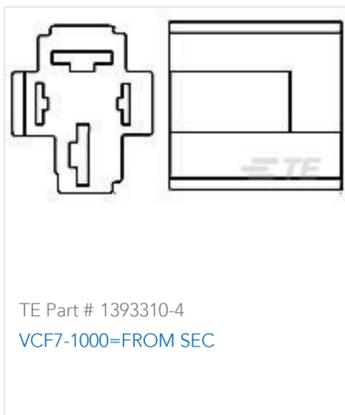
Solder Process Capability

Not applicable for solder process capability

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



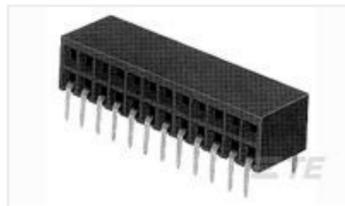
Also in the Series | Power Relay F



Customers Also Bought



TE Part #177537-3
2.5 M.I.S POST HDR ASSY 3P



TE Part #216604-8
2X 8P HV190FEDERLEI



TE Part #292171-3
CT POST HDR ASSY 3P IN-TUBE BL



TE Part #1558676-1
T9GS1L24-5



TE Part #1-1625892-4
3W SM M/OX 5% 150K



TE Part #3-1761603-3
IDC LOW PRO HDR 40P VERT BLUE



TE Part #1761987-9
ReceptacleConnAssm38PosTape/Re



TE Part #3-1827159-8
1.25FP,R08,SL,B,C,TR



TE Part #1-2040832-4
EMBOSS TAPING 0.25FPC BF-L-1.3



TE Part #2342933-2
QSFP-DD 1X1, STANDARD, W/
EXTRUDED HS

Documents

CAD Files

3D PDF

3D

Customer View Model

[ENG_CVM_CVM_3-1415001-2_A.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_3-1415001-2_A.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_3-1415001-2_A.3d_stp.zip](#)

English

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

Datasheets & Catalog Pages

Automotive Relay Application Notes

English

Power Relay F7, Maxi ISO, Plug-In

English



Product Specifications

Definitions General Purpose Relays

English