Hfk relay protection



Overview

In order to maintain the performance of the relay, please be careful not to drop the packages or subject them to strong impacts.

Key Takeaways

HFK relays from Hongfa are designed with robust protection features to ensure reliable operation under electrical and environmental stresses.

Overview of HF

K RelaysHFK relays are automotive-grade electromechanical relays widely used in vehicles and industrial applications. They are engineered for high reliability, shock and vibration resistance, and extended temperature ranges, making them suitable for harsh operating conditions. The series includes models like HFK7-T, HFK10, and HFK15-QH, each with specific current and voltage ratings.

Protective Features

Overcurrent and Inrush Protection HFK relays are rated for maximum continuous currents (e.g., 30A for HFK7-T) and peak inrush currents (up to 100A), allowing them to handle transient loads without damage. This ensures the relay contacts and coil are protected from excessive current surges.

Voltage Spike Suppression Many HF

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K relays include parallel diodes or Zener diodes to suppress voltage spikes generated when the coil is de-energized, protecting both the relay and surrounding circuitry. Thermal and Environmental Protection The relays are designed to operate over extended temperature ranges (up to 125°C or higher) and are resistant to shock and vibration, which is critical for automotive applications.

PC

B mounting guidelines, including double-layer boards with thick copper foils, help dissipate heat and maintain insulation integrity.

Mechanical and Electrical Endurance HF

K relays undergo rigorous testing for mechanical endurance (switching cycles) and electrical endurance (contact load handling), ensuring long-term reliability under repeated operation.

Compliance and Safety Standards HF

K relays are RoHS and ELV compliant, and Hongfa adheres to automotive standards such as QC/T695, ensuring that the relays meet industry safety and quality requirements.

Installation and Handling Recommendations

Handle relays carefully to avoid physical damage during transport or installation. Use reinforced packaging for shipping and storage to maintain performance. Ensure proper PCB design with adequate copper thickness and trace width to support rated currents and prevent overheating.

For applications involving water cleaning or surface processing, consult Hongfa for specific operating voltage and protection requirements. ConclusionHFK relays provide comprehensive protection through current and voltage handling, thermal resilience, and mechanical robustness. Proper installation, adherence to datasheet specifications, and use of suppression components ensure safe and reliable operation in automotive and industrial systems.

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Article Content

HFK8-T | AUTOMOTIVE RELAY | Automotive Relay

In order to maintain the performance of the relay, please be careful not to drop the packages or subject them to strong impacts. If the outer box is damaged or

HFK15-QH | AUTOMOTIVE RELAY | Automotive Relay | Relays

In order to maintain the performance of the relay, please be careful not to drop the packages or subject them to strong impacts. If the outer box is damaged or deformed, please open the box for inspection.

HFK10/HFK10-T AUTOMOTIVE RELAY

T (XXX) Notes: 1) Contact is recommended for suitable condition and specifications if water cleaning or surface process is involved in assembling relays on PCB. 2) The customer special requirement

Hongfa Relay HFK10/HFK10-T

Hongfa Relay HFK10/HFK10-T Series#: Hongfa Automotive Relay Product Details Max ntinous current 70A Max.making current 200A Extended temp. range up

Hongfa Automotive Relay

Boasting safety certifications from UL, TUV, and CQC, the HFK series is engineered to deliver unwavering stability and protect electrical architectures against continuous heavy strain.

Types of Electrical Protection Relays or Protective Relays

□□ Key learnings: Protective Relay Definition: A protective relay is an automatic device that senses abnormal conditions in electrical circuits and triggers actions to isolate faults. Types of

HFK8-T/12-SHSPT | HF (Xiamen Hongfa Electroacoustic)

A PCB assembly fixture is needed to protect and support this part during the assembly process.

HFK7-T datasheet

Remarks: If the customer needs to provide other specifications of the operating voltage of the product. Notes: Contact is recommended for suitable condition and specifications if water cleaning or surface

HFK7-T/12-HST | HF (Xiamen Hongfa Electroacoustic) | JLCPCB

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HFK7-T/12-HST - THroughhole Automotive Relays ROHS. Check prices, specs, datasheet, and order now!

Hongfa Relay HFK8-T Series

We are First Class Hongfa Relays dealer and Hongfa Relays distributor in China. We can Supply all Hongfa Relays,such as Hongfa Automotive Relay, Hongfa

HFK10-T (C16) | AUTOMOTIVE RELAY | Automotive Relay | Relays

HFK10-T (C16) - HONGFA Automotive Relay Product Information.Explore detailed specifications, download product files, and get answers to your inquiries.

HFK7-T AUTOMOTIVE RELAY

HFK7-T AUTOMOTIVE RELAY Features Max ntinous current 30A Max.making current 100A Extended temp. range up to 125

117-120 HFK10-T(C16)_en

After the relay is turned on and stabilized, the coil excitation voltage is reduced to 12V for holding. Notes:1) Contact us for suitable soldering conditions and product specifications if post-soldering

Contact Us

Continue your research online:

Website: https://bagyou.es
Technical inquiry: https://bagyou.es/project-enquiry.html

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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