



## Full Bridge Motor Driver 8-Pin SO T/R

Manufacturer: <u>Diodes Inc</u>

Package/Case: SOP8

**Product Type:** Driver ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

## **General Description**

The ZXBM5210 is a highly integrated high performance single chip solution for reversible brushed direct current (DC) motors and actuators. For system flexibility the device has four modes of operation: forward, reverse, brake and standby modes. The operating mode and direction of rotation can be slected an by the FWD and REV pins. Additionally, the motor speed can be controlled linearly by changing the duty ratio of the PWM signal on the FWD or REV pins in the PWM mode or alternatively by adjusting the DC voltage input signal to the VREF pin in the Vref mode. The device has a wide supply voltage range of 3V to 18V and the operating ambient temperature range of  $-40^{\circ}$ C to  $+105^{\circ}$ C. To help protect the IC and the motor coil the ZXBM5210 includes under voltage lockout, over voltage, over current and over thermal shutdown protection functions. Once the safe operating range has been exceeded the device shuts down the output drive to help prevent over stress on the IC or the coil. The device internal current protection threshold is 1.5A typical at 12V. To aid power efficiency the ZXBM5210 has a standby mode, consuming  $32\mu A$  typical. Product reliability and robustness is further enhanced by the devices' high ESD withstand capability of 6kV and extended operating temperature ranges. The ZXBM5210 is available in the standard SO-8 and thermally enhanced SO-8EP packages.

**Key Features** 

Supports single-coil reversible DC motor applications

Operating voltage: 3V to 18V

Four modes of operations: Forward, Reverse, Brake and Standby

Low quiescent current of 0.85mA typical in normal operation and 32µA in standby mode

Internal over current protection

Under voltage lockout and over voltage protection

Over temperature protection

6kV ESD withstand capability

Standard SO-8 and thermally enhanced SO-8EP

Totally Lead-Free & Fully RoHS Compliant

Halogen and Antimony Free. "Green" Device

Application

5V / 12V / 15V DC reversible motors

Home appliances

Handheld power tools

Valve open and close

ZXBM5210-SP-13

Remote control motorized toys

Medium Voltage/ Low Power DC Motors

## **Recommended For You**

ZXRE125EFTA ZXCT1010E5TA

Diodes Inc Diodes Inc Diodes Inc

SOT-23 SOT23-5 HSOP8

ZXCT1008FTA ZXRE125DFTA ZXCT1109QSA-7

Diodes Inc Diodes Inc Diodes Inc

SOT-23-3 SOT-23 SOT-23

ZXGD3006E6TA ZXGD3004E6TA ZXGD3114N7TC

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SOT-23-6 SOT-23-6 SO-7

ZXGD3112N7TC ZXGD3108N8TC ZXBM5409Q-N-U

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SO-7 SOP-8 PDIP-8

ZXCT1023DFGTA ZXGD3111N7TC AP3012KTR-G1

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