



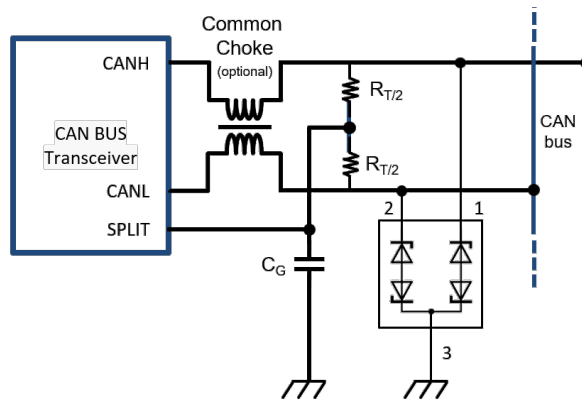
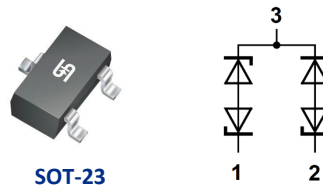
# Automotive Bi-directional ESD Protection Diode

The TESDA24VB30P2CX is Bidirectional ESD rated clamping cell to protect power interfaces, control line, or low speed data line in an electronic system. The capacitance  $C_d$  has to be smaller than 100 pF to maintain signal integrity at the maximum data rate of 20 kbit/s. To minimize the total impact of the diode on the system  $C_d$  should be smaller than 30 pF. It has been specifically designed to protect sensitive electronic components that are connected to power and control lines from over-voltage damage by Electrostatic Discharging (ESD), and Lightning.

## Key Features

- AEC-Q101 qualified
- ESD protect for 2 line with bidirectional.
- Provide ESD protection for each channel to IEC61000-4-2 (ESD):  $\pm 30\text{kV}$  (air),  $\pm 30\text{kV}$  (contact)
- IEC61000-4-5 (Lightning): 5A (8/20 $\mu\text{s}$ )
- Suitable for 24V and below operating voltage
- Protect I/O line or power line.

## Package and Circuit diagram



Typical application: ESD protection of two automotive CAN bus lines

## Product Portfolio

Part Number	$V_{WM}$	$C_j$ max	ESD robustness (IEC61000-4-2)	IPPM (at $t_p = 8/20\mu\text{s}$ )
TESDA24VB30P2CX	24V	30pF	30KV	5A

For more information or other products, please visit TSC website <https://www.taiwansemi.com/>