
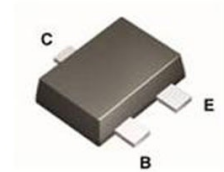


ESD Suppressor Diode TVS Uni-Dir/Bi-Dir 5V 20Vc Automotive 3-Pin SOT-523 T/R

Manufacturer:	Semtech Corporation
Package/Case:	SOT-523
Product Type:	Thyristors
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The RClamp0582BQ.TCT is a low capacitance TVS diode designed to provide protection against voltage transients caused by electrostatic discharge (ESD), lightning, or other transient voltage events. It offers fast response times and low clamping voltages to effectively suppress transient voltages and safeguard sensitive electronic components.

Key Features

Low Capacitance: The diode has low capacitance, which helps to minimize signal distortion and preserve signal integrity in high-speed data and communication applications.

Fast Response Time: It provides fast response times to clamp transient voltages quickly, offering effective protection to sensitive components.

Low Clamping Voltage: The diode has a low clamping voltage, which limits the voltage excursion during a transient event, preventing damage to downstream components.

ESD Protection: It provides electrostatic discharge (ESD) protection to safeguard against ESD events during handling or operation.

Application

Data and communication interfaces: It can be used to protect USB, Ethernet, HDMI, and other high-speed data interfaces from ESD and transient voltage events.

Mobile devices: It can be used to protect smartphones, tablets, and other portable devices from ESD events that can occur during handling or charging.

Industrial equipment: It can be employed in industrial automation systems, motor drives, and control circuits to safeguard sensitive electronics from voltage transients.

Consumer electronics: It can be utilized in televisions, audio systems, gaming consoles, and other consumer electronics to protect against voltage surges.