

Product Overview

NIS6151: +5 Volt Electronic eFuse

For complete documentation, see the data sheet.

The NIS6150 is a cost effective, resettable fuse which can greatly enhance the reliability of a USB application from both catastrophic and shutdown failures. It is designed to buffer the load device from excessive input voltage which can damage sensitive circuits and to protect the input side circuitry from reverse currents. It includes an overvoltage clamp circuit that limits the output voltage during transients but does not shut the unit down, thereby allowing the load circuit to continue its operation.

Features

- 200 mΩ Max RDS(on)
- Integrated Reverse Current Protection
- Adjustable Output Current Limit Protection with Thermal Shutdown
- IEC61000-4-2 Level 4 ESD Protection for Vbus up to ±8 kV
- Fast Response Overvoltage Clamp Circuit with Selectable Level
- Internal Undervoltage Lockout Circuit
- Digital Enable with Separate FLAG for Fault Identification
- Integrated Current Monitoring
- Both Latching and Auto-Retry Options Available
- NIV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q100 Qualified and PPAP Capable

For more features, see the data sheet

Benefits

- Increase efficiency

Applications

- Automotive Infotainment
- USB 2.0/3.0/3.1 VBUS
- USB Type-C PD Charging
- Solid State Drives
- Mother Boards

End Products

- Solid State Drives

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Type	V _I Max (V)	r _{DS(on)} Max (mΩ)	T _{SD} Typ (°C)	T _{hyst} Typ (°C)	Package Type
NIS6151MT1TXG	0.4912	Pb-free Halide free non AEC-Q and PPAP	Active	Latch	10	200	175	45	WDFNW-10
NIS6151MT2TXG	0.4912	Pb-free Halide free non AEC-Q and PPAP	Active	Auto-Retry	10	200	175	45	WDFNW-10

For more information please contact your local sales support at www.onsemi.com.

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