Product Overview

NUP2128: Dual Line, +175°C $T_{J(MAX)}$ CAN Bus Protector

For complete documentation, see the data sheet.

The NUP2128 has been designed to protect both CAN, CAN-FD, and LIN transceivers from ESD and other harmful transient voltage events. This device provides bidirectional protection for each data line in a single compact SC-70 (SOT-323) package, giving the system designer a low cost option for improving system reliability and meeting stringent EMC requirements. With its +175°C TJ(MAX) rating, this device is suitable for high temperature, mission critical applications.

Features

- Low Reverse Leakage Current (< 100 nA)
- IEC Compatibility:IEC 61000-4-2 (ESD): Level 4IEC 61000-4-4 (EFT): 50 A (5/50 ns)IEC 61000-4-5 (Lighting) 3.5 A (8/20 μs)
- ISO 7637-1, Nonrepetitive EMI Surge Pulse 2, 8.0 A (1/50 μs)
- ISO 7637-3, Repetitive Electrical Fast Transient (EFT)EMI Surge Pulses, 50 A (5/50 ns)
- Flammability Rating UL 94 V-0
- SZ Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable
- These are Pb-Free Devices

Benefits

- Low System Level Standby Current
- High System Level EMC Survivability
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Applications

- In-Vehicle Networking
- HS/LS CAN & CAN-FD
- Fault Tolerant CAN
- LIN

End Products

- Automotive Gateways
- Automotive Control Units

Part Electrical Specifications

Product	Pricing ($/Unit)	Compliance	Status	Interface	Number of Lines	Direction	C Max (pF)	$V_{(BR)}$ Min (V)	V_{RWM} Max (V)	I_R Max (μA)	P_{PK} Max (W)	Package Type
NUP2128WTT1G	0.0516	Pb-free Halide free	Active	CAN-FD LIN CAN	2	Bidirectional	13	28	26.5	750 0.1	165	SC-70-3 / SOT-323-3
SZNUP2128WTT1G	0.0569	AEC Qualified PPAP Capable Pb-free Halide free	Active	CAN LIN CAN-FD	2	Bidirectional	13	28	26.5	750 0.1	165	SC-70-3 / SOT-323-3

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

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