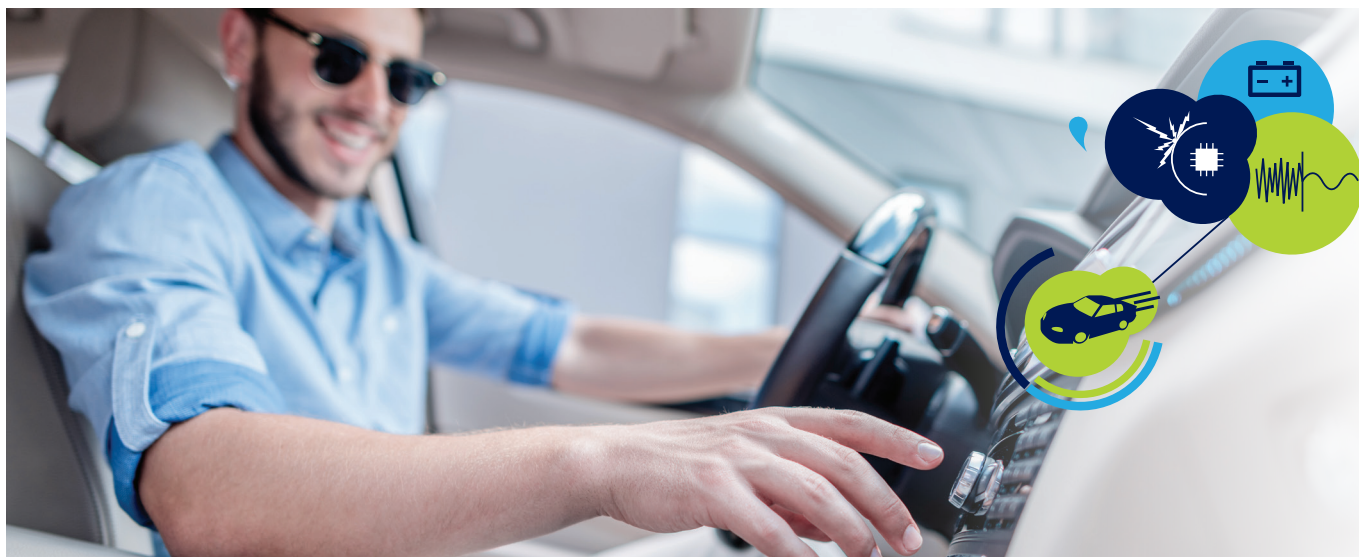


Automotive-grade ESD protections for CAN transceivers



Automotive-grade ESD protection solutions simplify qualification and speeds time-to-market

CAN-type interfaces need bidirectional protection devices to meet automotive requirements. Following our first series of ESD protection ICs in an SOT23-3L package dedicated to cars, ST now offers a second series for higher voltages in an SOT323 package for cars and trucks. Original devices were rated 30 pF for CAN, while the new ones are rated approximately 15 pF and even as low as 3.5 pF to be compatible with CAN-FD and Flexray requirements. The entire family is compliant with AEC-Q101 and ISO 16750-2 (Jump start test and reverse battery connection) specifications.

KEY FEATURES

- Dual-line ESD and EOS protection
- Bidirectional devices
- Max pulse power: up to 250 W (8/20 μ s)
- Stand-off voltage: from 24 V up to 36 V
- Low leakage current: 10 nA max
- Compliant with:
 - ISO 7637-3a and 3b
 - ISO 10605 / IEC 61000-4-2: up to 30 kV air and contact
 - ISO 16750-2
 - AEC-Q101

KEY BENEFITS

- Plug and play solution, thanks to products already approved by various car makers. Able to work in tough environments with 175 °C capability
- CAN transceiver protected against ESD and EOS
- Enables high-density PCB thanks to the small package (SOT23-3L and SOT323-3L)
- Wide range of products with low capacitance for CAN-FD, Flexray, and various voltages to fit car and truck requirements

ELECTRICAL PARAMETERS (AT $T_{AMB} = 25\text{ }^{\circ}\text{C}$)

Order code	I_{RM}	V_{RM}	V_{BR}	I_{PP} (8/20)	ISO 10605 ($R=330\text{ }\Omega$, $C=330\text{pF}$)	C		Package
	(μA)	(V)	min. (V)	max. (A)	(kV)	typ. pF	max. pF	
ESDCAN24-2BLY	0.1	24	27	5.5	30	-	30	SOT23-3L
ESDCAN01-2BLY	0.1	24	25	5.5	30	-	30	SOT23-3L
ESDCAN04-2BLY	0.05	25.5	27.5	3.7	30	17	19	SOT23-3L
ESDCAN06-2BLY	0.1	35	38	3	22	13	15	SOT23-3L
ESDCAN02-2BWY	0.01	26.5	28.5	3.7	30	3	3.5	SOT323-3L
ESDCAN03-2BWY	0.01	24	26.5	3.7	30	3	3.5	SOT323-3L
ESDCAN04-2BWY	0.05	25.5	27.5	3.7	30	17	19	SOT323-3L
ESDCAN05-2BWY	0.1	36	39	3	30	3	3.5	SOT323-3L
ESDCAN06-2BWY	0.1	35	38	3	22	13	15	SOT323-3L

CAN PROTECTION FAMILY

