

# Bidirectional ESD / Transient Suppressors

**COMCHIP**  
SMD DIODE SPECIALIST



## CEE / CEF Series-G (RoHS Device)

**Current: 5.1A**

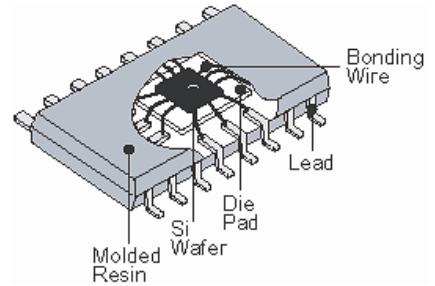
**Voltage: 5V, 24V**

### Features

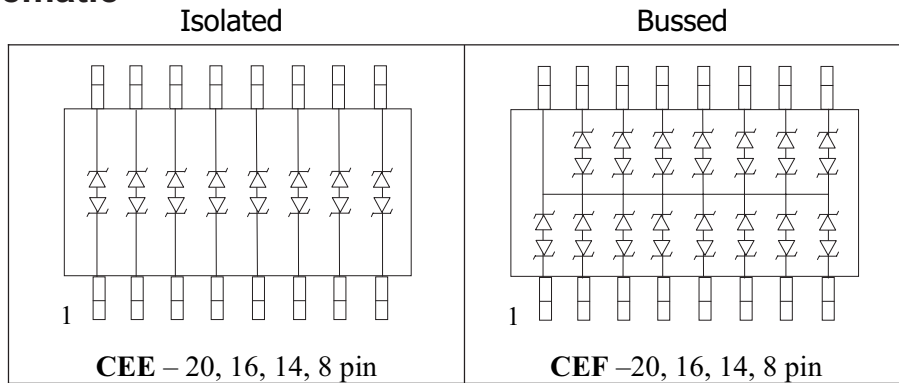
- (16kV) IEC 61000-4-2 rating
- Surface Mount Package
- High Component Density

### Applications

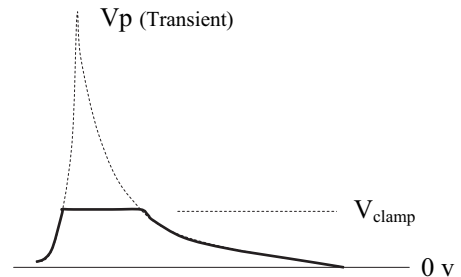
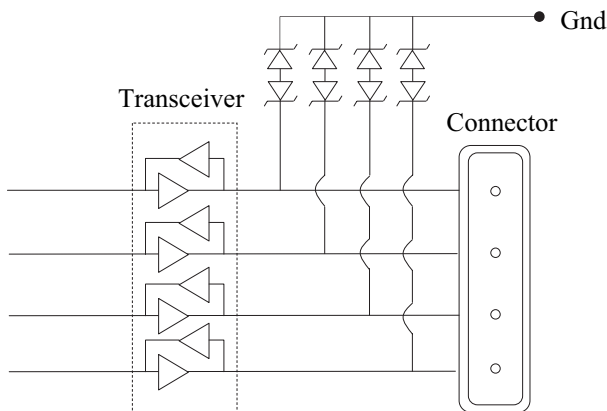
- ESD Suppression
- Transient Suppression



### Circuit Schematic



### Application Schematic



# Bidirectional ESD / Transient Suppressors



**Specifications:** ( Ta = 25°C )

**24V Characteristic (CAN bus)**

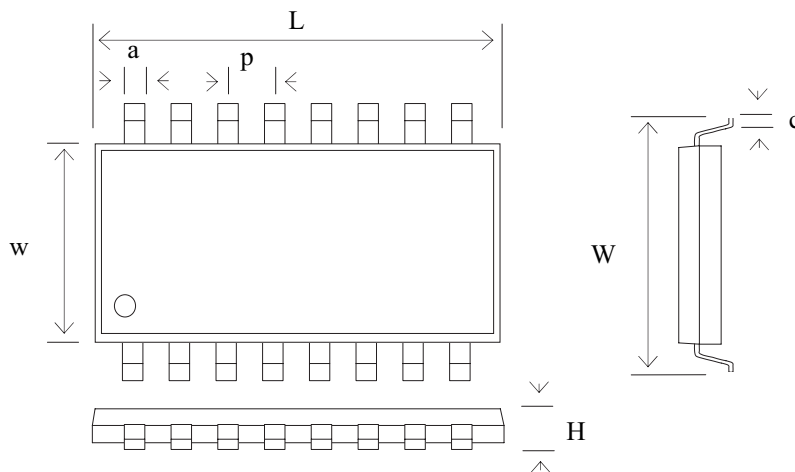
Symbol	Characteristic	Min	Typ	Max	Units	Test Condition
V <sub>BD</sub>	Diode breakdown voltage	25	28	35	V	I <sub>F</sub> = 1 ma
I <sub>L</sub>	Leakage current		0.1	2.0	uA	24v
C <sub>T</sub>	Capacitance		15		pF	@ 1Mhz
V <sub>ESD</sub>	Channel clamp voltage		-	± 28	V	8kV event
V <sub>PV</sub>	Peak ESD voltage capability			16	kV	IEC 61000-4-2
I <sub>pp</sub> *	Peak Pulse Current			15	A	8 / 20 us

**5V0 Characteristic**

Symbol	Characteristic	Min	Typ	Max	Units	Test Condition
V <sub>BD</sub>	Diode breakdown voltage	5.1	7.0	10	V	I <sub>F</sub> = 1 ma
I <sub>L</sub>	Leakage current		+0.1	+ 2.0	uA	5v
C <sub>T</sub>	Capacitance		15	20	pF	@ 1Mhz
V <sub>ESD</sub>	Channel clamp voltage		-	± 7.0	V	8kV event
V <sub>PV</sub>	Peak ESD voltage capability			16	kV	IEC 61000-4-2
I <sub>pp</sub> *	Peak Pulse Current			5.1	A	8 / 20 us

\* one diode conducting

**Package Information:**



Dimensions in ( mm ):

Package Code	Package Power	Number of Pins	L ± 0.2	W ± 0.2	w ± 0.2	H ± 0.2	p ± 0.1	a ± 0.1	c ± 0.1
N08	0.4 w	08	4.83	5.99	3.81	1.60	1.27	0.41	0.66
N14	0.6 w	14	8.66	5.99	3.81	1.60	1.27	0.41	0.66
N16	0.8 w	16	9.91	5.99	3.81	1.60	1.27	0.41	0.66
Q16	0.8 w	16	9.91	5.99	3.81	1.6	.0635	0.25	0.66
W16	1.0 w	16	10.44	10.36	7.62	2.40	1.27	0.41	0.66
W20	1.2 w	20	12.70	10.36	7.62	2.40	1.27	0.41	0.66

**Ordering Information:**

CEE	N16	5V0	-G
-----	-----	-----	----

Type	Package Code	Voltage	RoHS Compliant
CEE	From table above	5V0	
CEF		24V	