

Bidirectional ESD / Transient Suppressor

COMCHIP
SMD DIODE SPECIALIST

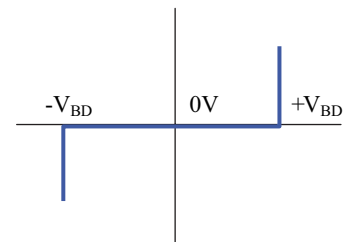
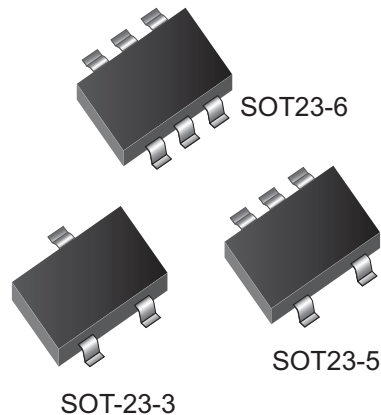
CE Series -G (RoHS Device)

Features

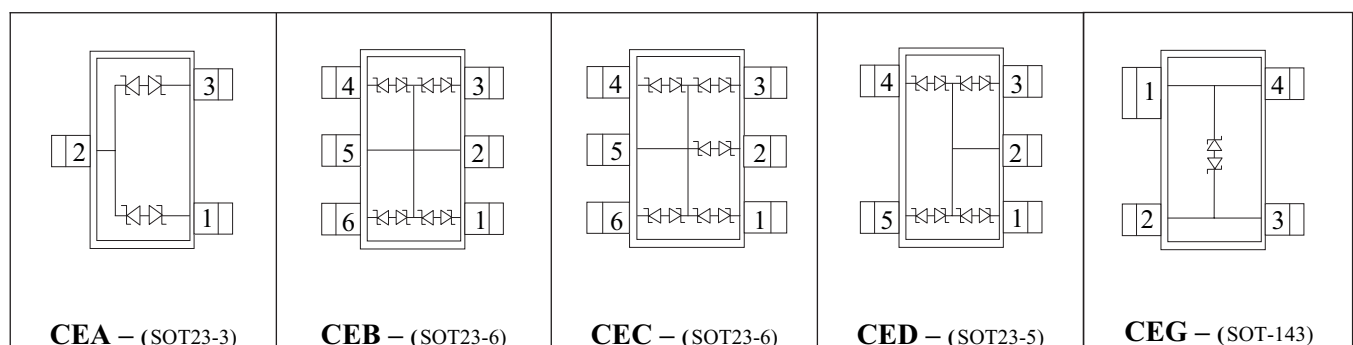
- (16kV) IEC 61000-4-2 rating
- Surface mount package
- High component density

Applications

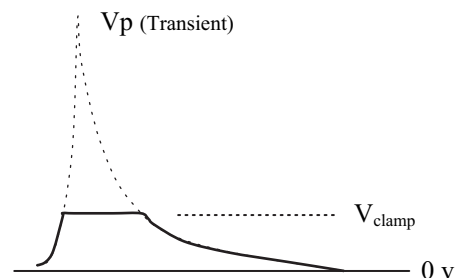
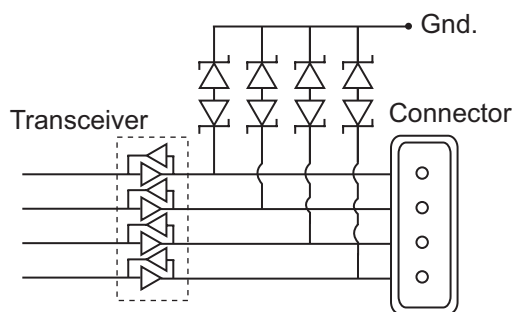
- ESD suppression
- Transient suppression
- Automotive CAN Bus



Schematic



Application Schematic



Specifications (T_a = 25°C)

Symbol	Characteristic	Min.	Max.	Units
T _o	Operation Temperature Range	-55	+125	°C

Bidirectional ESD / Transient Suppressor

Specifications:(Ta = 25°C)

36V Characteristic PRELIMINARY

Symbol	Characteristic	Min	Typ	Max	Units	Test Condition
V _{BD}	Diode breakdown voltage	38	40		V	I _F = 1 ma
I _L	Leakage current		0.1	2.0	uA	36v
C _T	Capacitance		5		pF	@ 1Mhz
V _{ESD}	Channel clamp voltage		-	± 40	V	8kV event
V _{PV}	Peak ESD voltage capability			16	kV	IEC 61000-4-2
I _{pp} *	Peak Pulse Current			15	A	8 / 20 us

24V Characteristic (CAN bus)

Symbol	Characteristic	Min	Typ	Max	Units	Test Condition
V _{BD}	Diode breakdown voltage	25	28		V	I _F = 1 ma
I _L	Leakage current		0.1	2.0	uA	24v
C _T	Capacitance		10		pF	@ 1Mhz
V _{ESD}	Channel clamp voltage		-	± 25	V	8kV event
V _{PV}	Peak ESD voltage capability			16	kV	IEC 61000-4-2
I _{pp} *	Peak Pulse Current			15	A	8 / 20 us

12V Characteristic PRELIMINARY

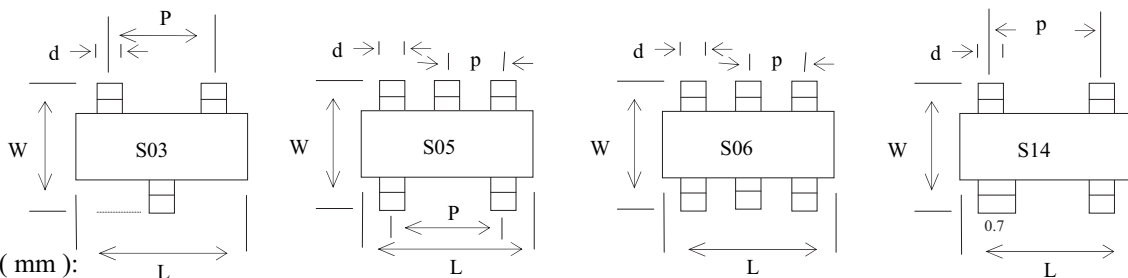
Symbol	Characteristic	Min	Typ	Max	Units	Test Condition
V _{BD}	Diode breakdown voltage	14	17		V	I _F = 1 ma
I _L	Leakage current		0.1	2.0	uA	12v
C _T	Capacitance		12		pF	@ 1Mhz
V _{ESD}	Channel clamp voltage		-	± 17	V	8kV event
V _{PV}	Peak ESD voltage capability			16	kV	IEC 61000-4-2
I _{pp} *	Peak Pulse Current			15	A	8 / 20 us

5V0 Characteristic

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

* one diode conducting

Package Information:



Dimensions in (mm):

Code	Power	Pins	L ± 0.2	W ± 0.2	p ± 0.1	P ± 0.1	Pkg. Height	d ± 0.1
S03	225 mw	3	2.90	2.30	-	1.90	1.0	0.43
S05	225 mw	5	2.90	2.80	0.95	1.90	1.0	0.43
S06	225 mw	6	2.90	2.80	0.95	-	1.0	0.43
S14	225 mw	4	2.90	2.80	-	1.90	1.0	0.43

Ordering Information:

CEA
Type

CEA
CEB
CEC
CED
CEG

S03

Package Code
From table above

5V0

Voltage
5V0 / 12V
12V / 24V

-G

RoHS Compliant