

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Bidirectional ESD / Transient Suppressor SMD DIODE SPEC



CE Series -G (RoHS Device)

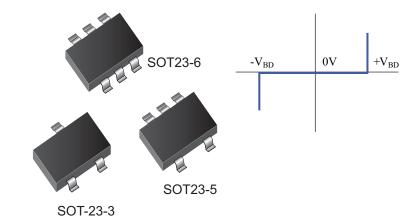
Features

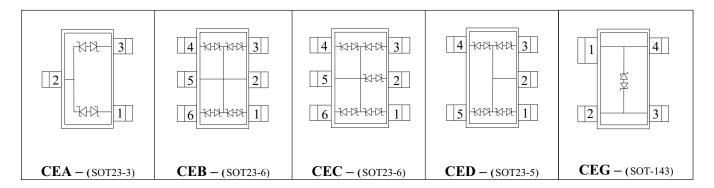
- (16kV) IEC 61000-4-2 rating
- Surface mount package
- · High component density

Applications

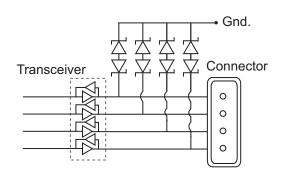
- ESD suppression
- Transient suppression
- Automotive CAN Bus

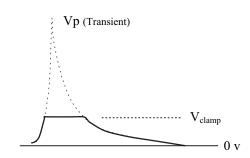
Schematic





Application Schematic





Specifications (Ta = 25°C)

Symbol	Characteristic	Min.	Max.	Units
То	Operation Temperature Range	-55	+125	οС

Bidrectional ESD / Transient Suppressor



Specifications: ($Ta = 25^{\circ}C$)

36V Characteristic PRELIMINARY

Symbol	Characteristic	Min	Тур	Max	Units	Test Condition
$ m V_{BD}$	Diode breakdown voltage	38	40		V	$I_F = 1 \text{ ma}$
I_{L}	Leakage current		0.1	2.0	uA	36v
C_{T}	Capacitance		5		pF	@ 1Mhz
V_{ESD}	Channel clamp voltage		-	<u>+</u> 40	V	8kV event
V_{PV}	Peak ESD voltage capability			16	kV	IEC 61000-4-2
Ipp *	Peak Pulse Current			15	A	8 / 20 us

24V Characteristic (CAN bus)

Symbol	Characteristic	Min	Тур	Max	Units	Test Condition
$V_{ m BD}$	Diode breakdown voltage	25	28		V	$I_F = 1 \text{ ma}$
I_{L}	Leakage current		0.1	2.0	uA	24v
C_{T}	Capacitance		10		pF	@ 1Mhz
$ m V_{ESD}$	Channel clamp voltage		-	± 25	V	8kV event
V_{PV}	Peak ESD voltage capability			16	kV	IEC 61000-4-2
Ipp *	Peak Pulse Current			15	A	8 / 20 us

12V Characteristic PRELIMINARY

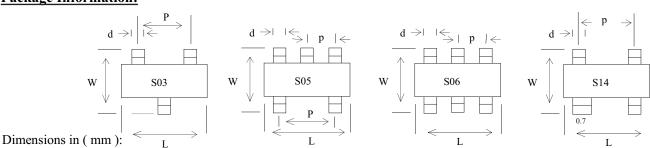
Symbol	Characteristic	Min	Тур	Max	Units	Test Condition
$ m V_{BD}$	Diode breakdown voltage	14	17		V	$I_F = 1 \text{ ma}$
I_{L}	Leakage current		0.1	2.0	uA	12v
C_{T}	Capacitance		12		pF	@ 1Mhz
V_{ESD}	Channel clamp voltage		-	<u>+</u> 17	V	8kV event
$ m V_{PV}$	Peak ESD voltage capability			16	kV	IEC 61000-4-2
Ipp *	Peak Pulse Current			15	A	8 / 20 us

5V0 Characteristic

Symbol	Characteristic	Min	Тур	Max	Units	Test Condition
$ m V_{BD}$	Diode breakdown voltage	5.1	7.0		V	$I_F = 1 \text{ ma}$
I_{L}	Leakage current		<u>+</u> 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
Ipp *	Peak Pulse Current			5.1	A	8 / 20 us

^{*} one diode conducting

Package Information:



Code	Power	Pins	L ± 0.2	$W \pm 0.2$	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

RoHS Compliant