

# ESD / Transient Suppressor

**COMCHIP**  
SMD DIODE SPECIALIST

## CKL Series -G (RoHS Device)

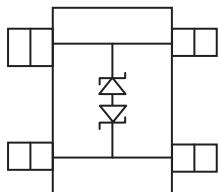
### Features:

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

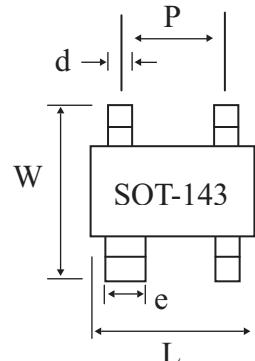
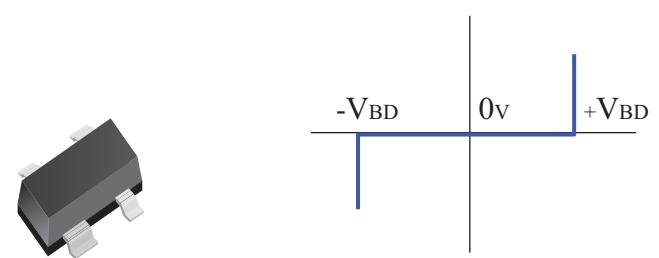
### Applications:

- ESD Suppression
- Transient Suppression
- Automotive CAN bus

### Schematics:



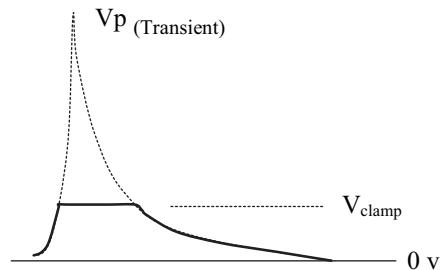
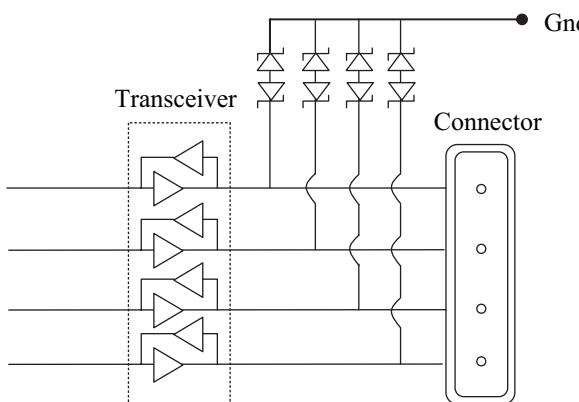
### Package:



### Dimensions in (mm):

Package	Package Code	Number of Pins	L $\pm$ 0.2	W $\pm$ 0.2	d $\pm$ 0.1	P $\pm$ 0.1	Pkg. Height $\pm$ 0.2	e $\pm$ 0.1
SOT-143	S14	4	2.9	2.3	0.45	1.9	0.95	0.8

### Application:



**-G** suffix designates RoHS compliant Version

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## Ratings:

Symbol	Parameter	Value	Units
T <sub>O</sub>	Operating temperature	-55 to +150	°C
T <sub>D</sub>	Derating Temperature	70	°C

**Specifications:** ( Ta = 25°C )

## 36V Characteristic

Symbol	Characteristic	Min	Typ	Max	Units	Test Condition
V <sub>BD</sub>	Diode breakdown voltage	38	40		V	I <sub>F</sub> = 1 ma
I <sub>L</sub>	Leakage current		0.1	2.0	uA	36v
C <sub>T</sub>	Capacitance		5		pF	@ 1Mhz
V <sub>ESD</sub>	Channel clamp voltage		-	+ 40	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

## 24V Characteristic (CAN bus)

Symbol	Characteristic	Min	Typ	Max	Units	Test Condition
V <sub>BD</sub>	Diode breakdown voltage	25	28		V	I <sub>F</sub> = 1 ma
I <sub>L</sub>	Leakage current		0.1	2.0	uA	24v
C <sub>T</sub>	Capacitance		10		pF	@ 1Mhz
V <sub>ESD</sub>	Channel clamp voltage		-	+ 25	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

## 12V Characteristic

Symbol	Characteristic	Min	Typ	Max	Units	Test Condition
V <sub>BD</sub>	Diode breakdown voltage	14	17		V	I <sub>F</sub> = 1 ma
I <sub>L</sub>	Leakage current		0.1	2.0	uA	12v
C <sub>T</sub>	Capacitance		12		pF	@ 1Mhz
V <sub>ESD</sub>	Channel clamp voltage		-	+ 17	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		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		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

## Ordering Information:

<b>CKL</b>	<b>S14</b>	<b>36V</b>	<b>-G</b>
Type	Package Code	Voltage	RoHS Compliant
CKL	from table	5V0	
		12V	
		24V	
		36V	

\* 3,000 units per reel