

300W Transient Voltage Suppressor

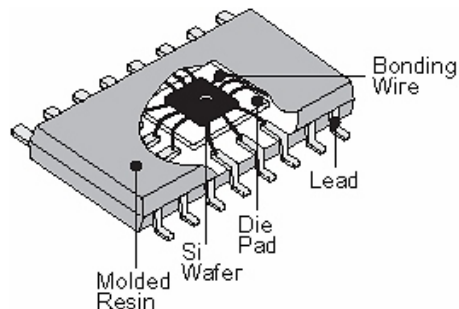
CT Series -G RoHS Device

Features

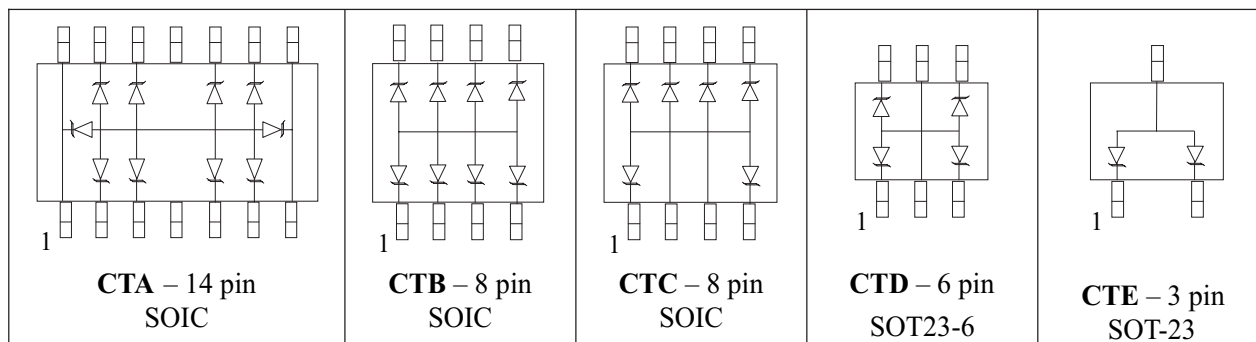
- (16kV) IEC 61000-4-2 rating.
- 8/20 μ S transient rated.
- Six working voltages (3.3, 5, 12, 15, 24, 36).

Applications

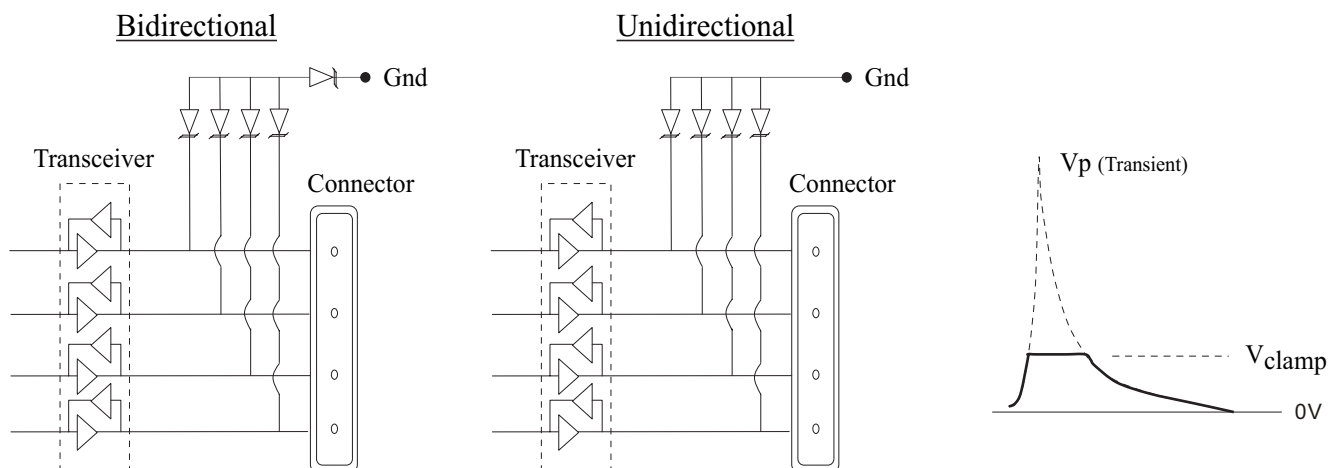
- Transient / ESD suppression.
- LAN/WAN.
- Peripherals.
- Set-Top Boxes.



Circuit Schematic



Application Schematic



300W Transient Voltage Suppressor

Maximum Ratings and Electrical Characteristics

Specifications: (Ta=25°C)

Rating	Symbol	Value	Units
Peak pulse power (8/20μS)	P _{PK}	300	Watts
Operating Temp. range	T _J	-55 to +125	°C
Soldering temperature	T _L	260 (10sec)	°C

3.3V Volt Characteristics (3V3)

Symbol	Characteristics	Min	Max	Units	Test Conditions
V _{BD}	Reverse breakdown voltage	4.0		V	I _F =1mA
I _L	Reverse leakage current		50	μA	@V _{BD} =3.3V
C _T	Capacitance		350	pF	@1MHz
V _C	Channel clamp voltage		8	V	8/20μS, 1A
I _{PP}	Peak pulse current		17	A	8/20μS

5V Volt Characteristics (5V0)

Symbol	Characteristics	Min	Max	Units	Test Conditions
V _{BD}	Reverse breakdown voltage	6.0		V	I _F =1mA
I _L	Reverse leakage current		10	μA	@V _{BD} =5V
C _T	Capacitance		350	pF	@1MHz
V _C	Channel clamp voltage		10	V	8/20μS, 1A
I _{PP}	Peak pulse current		17	A	8/20 μ S

12V Volt Characteristics (12V)

Symbol	Characteristics	Min	Max	Units	Test Conditions
V _{BD}	Reverse breakdown voltage	13.3		V	I _F =1mA
I _L	Reverse leakage current		1	μA	@V _{BD} =12V
C _T	Capacitance		120	pF	@1MHz
V _C	Channel clamp voltage		20	V	8/20μS, 1A
I _{PP}	Peak pulse current		12	A	8/20 μ S

15V Volt Characteristics (15V)

Symbol	Characteristics	Min	Max	Units	Test Conditions
V _{BD}	Reverse breakdown voltage	16.7		V	I _F =1mA
I _L	Reverse leakage current		1	μA	@V _{BD} =15V
C _T	Capacitance		75	pF	@1MHz
V _C	Channel clamp voltage		24	V	8/20μS, 1A
I _{PP}	Peak pulse current		10	A	8/20 μ S

24V Volt Characteristics (24V)

Symbol	Characteristics	Min	Max	Units	Test Conditions
V _{BD}	Reverse breakdown voltage	26.7		V	I _F =1mA
I _L	Reverse leakage current		1	μA	@V _{BD} =24V
C _T	Capacitance		50	pF	@1MHz
V _C	Channel clamp voltage		43	V	8/20μS, 1A
I _{PP}	Peak pulse current		5	A	8/20 μ S

36V Volt Characteristics (36V)

Symbol	Characteristics	Min	Max	Units	Test Conditions
V _{BD}	Reverse breakdown voltage	37		V	I _F =1mA
I _L	Reverse leakage current		1	μA	@V _{BD} =36V
C _T	Capacitance		40	pF	@1MHz
V _C	Channel clamp voltage		40	V	8/20μS, 1A
I _{PP}	Peak pulse current		3	A	8/20 μ S

Ordering Information:

CTA

N14

24V

-G

Type

Package Code

Voltage

RoHS compliant

CTA From table below

3V3, 5V0, 12V

CTB

15V, 24V, 36V

CTC

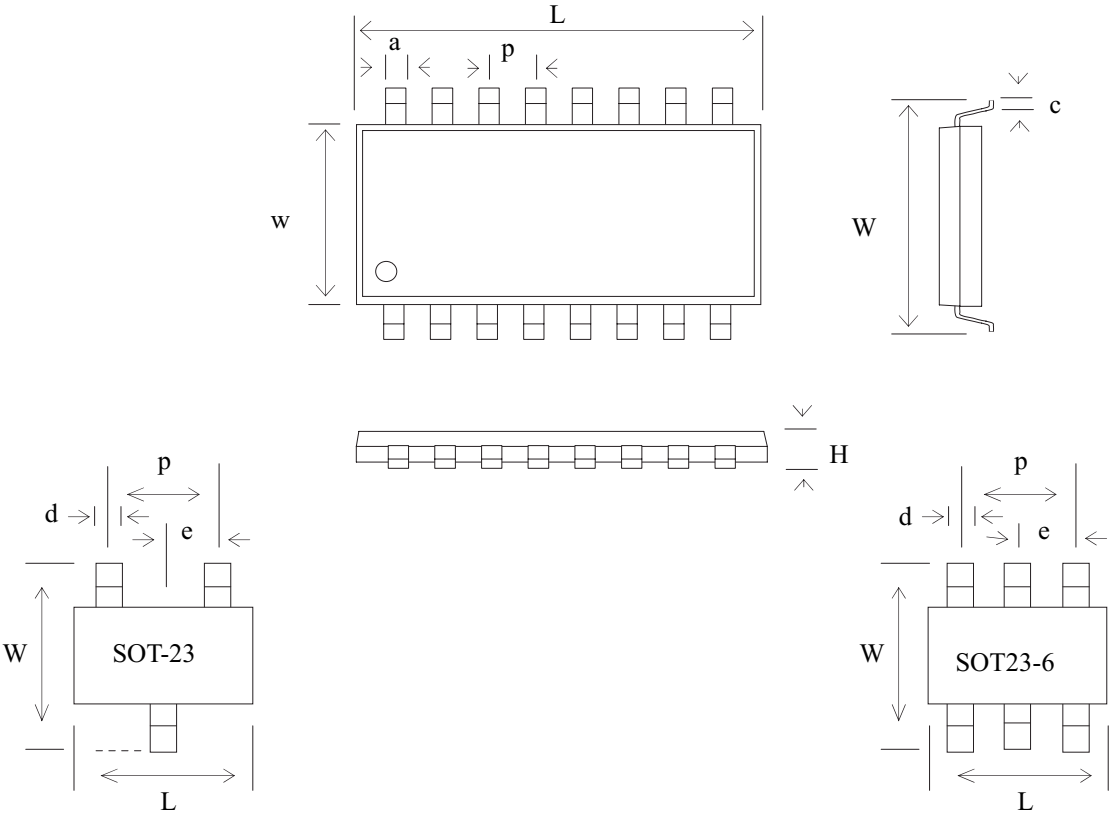
CTD

CTE

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Package Information:

Dimensions in (mm)



Package Code	Package Power	Number of Pins	$L \pm 0.2$	$W \pm 0.2$	$w \pm 0.2$	$p \pm 0.2$	$e \pm 0.1$	$A \pm 0.1$	$d \pm 0.1$	$H \pm 0.2$
N08	0.4W	8	4.83	5.99	3.81	1.60	1.27	0.41	0.66	0.95
N14	0.6W	14	8.66	5.99	3.81	1.60	1.27	0.41	0.66	0.95
S03	0.225W	3	2.92	2.30	0.95	1.91	0.95	0.53	0.43	0.95
S06	0.225W	6	2.92	2.80	1.20	1.91	0.95	0.53	0.43	0.95