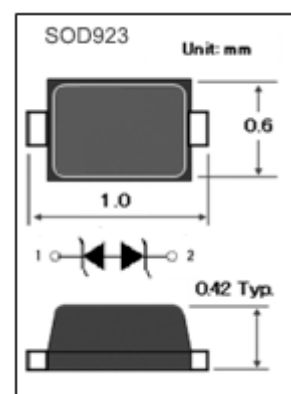


BTR9S23A10

- ◇ Bi-Directional Transient Voltage Suppressor
- ◇ Low capacitance and Low Leakage
- ◇ ESD Protection, IEC61000-4-2 Level 4
- ◇ SOD-923 Thin SMD
- ◇ RoHS compliant
- ◇ UL-94 V-0 / Green EMC
- ◇ Matte Tin Lead finish (Pb-Free)

Device Marking Code	
BTR9S23A10	Cx



Absolute Maximum Ratings (Ta = 25 °C)

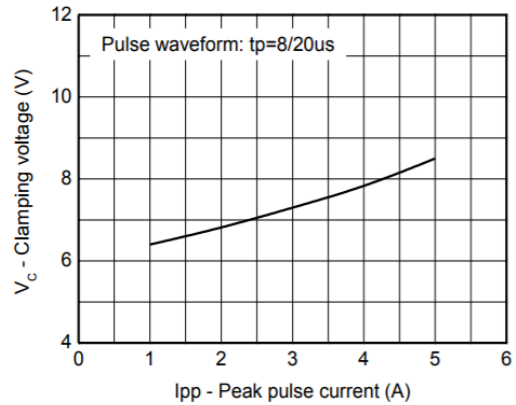
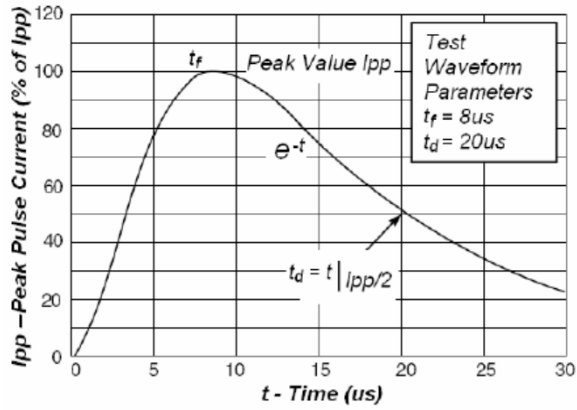
Symbol	Parameter	Value	Units
I_{PP}^{*1}	Maximum Reverse Peak Pulse Current	5.0	A
$V_{ESD-Air}$	ESD Voltage IEC61000-4-2 Air	± 15	kV
$V_{ESD-contact}$	ESD Voltage IEC61000-4-2 Contact	± 8	kV
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	-55 to +150	°C
P_D	Power Dissipation	150	mW

*1 $t_p = 8/20 \mu s$

Electrical Characteristics (Ta = 25 °C)

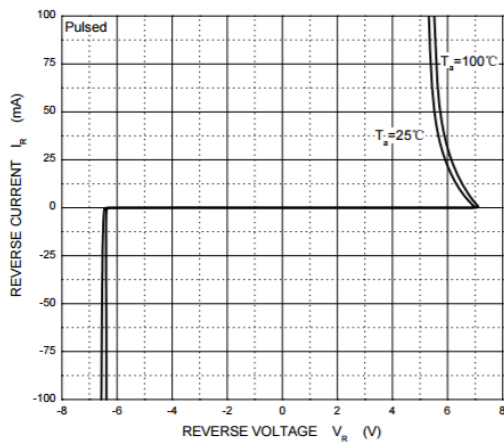
Symbol	Parameter	Conditions	Min	Typ	Max	Units
V_{RWM}	Reverse Working Peak Voltage				5.0	V
V_{BR}	Reverse Breakdown Voltage Pin 1 to 2 or Pin2 to 1	$I_T = 1mA$	5.6		8.2	V
I_R	Reverse Current	$V_{RWM} = \pm 5V$			1.0	μA
V_C	Clamping Voltage	$I_{pp}=1A$			8	V
V_C	Clamping Voltage	$I_{pp}=5A$			11	V
C_D	Diode Capacitance	$V_R = 0V, f = 1MHz$		13		pF

Typical Characteristics

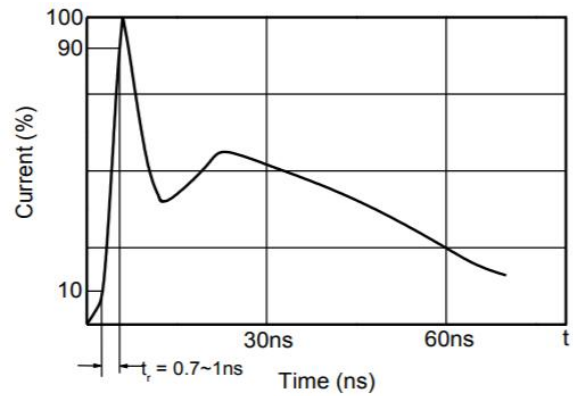


Clamping voltage vs. Peak pulse current

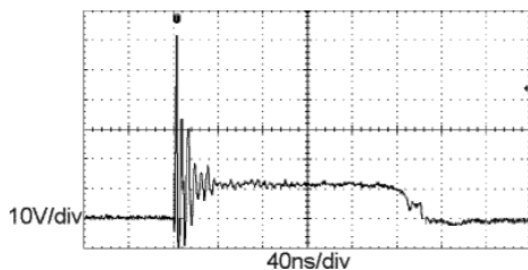
Pulse Waveform



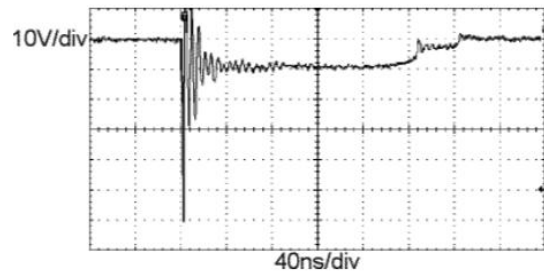
Reverse Characteristics



Contact discharge current waveform per IEC61000-4-2



ESD clamping
(+8kV contact discharge per IEC61000-4-2)



ESD clamping
(-8kV contact discharge per IEC61000-4-2)

Ordering Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BTR9S23A10	SOD-923	Tape & Reel 8000pcs /7" Reel	8 mm	2 mm	Conductive	

Package Dimensions

