Elektronische Bauelemente

STESDL05C

30W, 5V

Low Capacitance ESD Protection (Bi-directional)

RoHS Compliant Product
A suffix of "-C" specifies halogen and lead-free

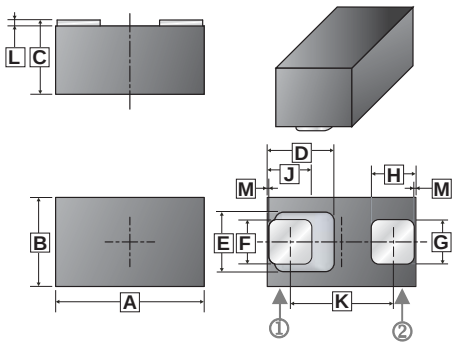
DESCRIPTION

The STESDL05C is an ESD transient voltage suppression component which provides a very high level of protection for sensitive electronic components that may be subjected to electrostatic discharge (ESD). It is particularly well-suited for cellular phones, portable device, digital cameras, power supplies and many other portable applications because of its ultra small package.

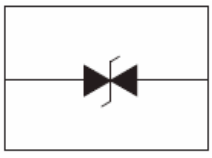
The STESDL05C is Bi-directional, safely dissipate ESD strikes of Level 4, IEC61000-4-2, exceeding the maximum requirement.

The STESDL05C is available in a WBFBP-02C package with peak reverse working voltage of 5 voltages.

WBFBP-02C



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.950	1.050	G	0.275	0.325
B	0.550	0.650	H	0.275	0.325
C	0.450	0.550	J	0.275	0.325
D	0.450 REF.		K	0.675	0.725
E	0.400 REF.		L	0.010	0.070
F	0.275	0.325	M	0.010 REF.	



Bi-direction

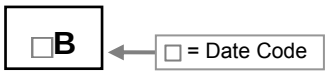
APPLICATIONS

- Digital Cameras
- Portable Instrumentation
- Notebooks, Desktops, and Serves
- Personal Digital Assistants (PDAs)
- Cell phone handsets and accessories

FEATURES

- low clamping voltage
- Low leakage current
- Small package

MARKING



PACKAGE INFORMATION

Package	MPQ	Leader Size
WBFBP-02C	10K	7 inch

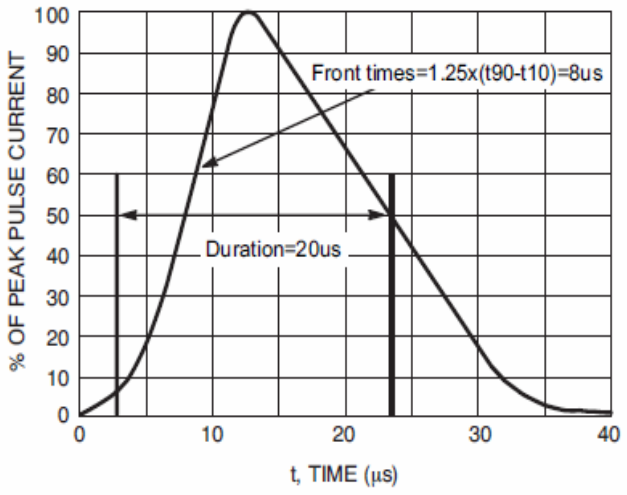
ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Rating		Symbol	Value	Unit
IEC 61000-4-2 (ESD)	Air contact		±15	kV
	Contact discharge		±8	
Peak pulse power (tp=8/20us)		P_{PK}	30	W
Peak pulse current (tp=8/20us)		I_{PP}	3	A
Storage temperature range		T_J, T_{STG}	125, -55 ~ 150	°C
Lead temperature		T_L	260	°C

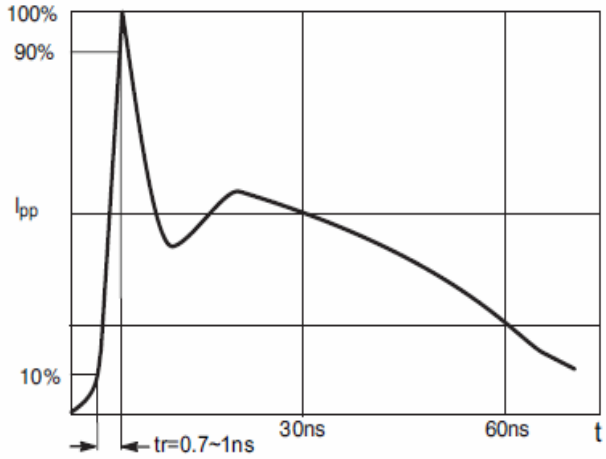
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Reveres maximum working voltage	V_{RWM}	I_R =1μA	-	5	-	V
Reveres leakage current	I_R	V_{RWM}=5V	-	-	1	μA
Reveres breakdown voltage	V_{BR}	I_T=1mA	6.2	7.5	8	V
Forward voltage	V_F	I_F=10mA	-	0.7	1	V
Clamping Voltage	V_C	I_{PP}=1A, tp=8/20us	-	-	8	V
		I_{PP}=3A, tp=8/20us	-	-	10	V
Junction capacitance	C_J	f=1MHz, V_R=0	-	4	6	pF

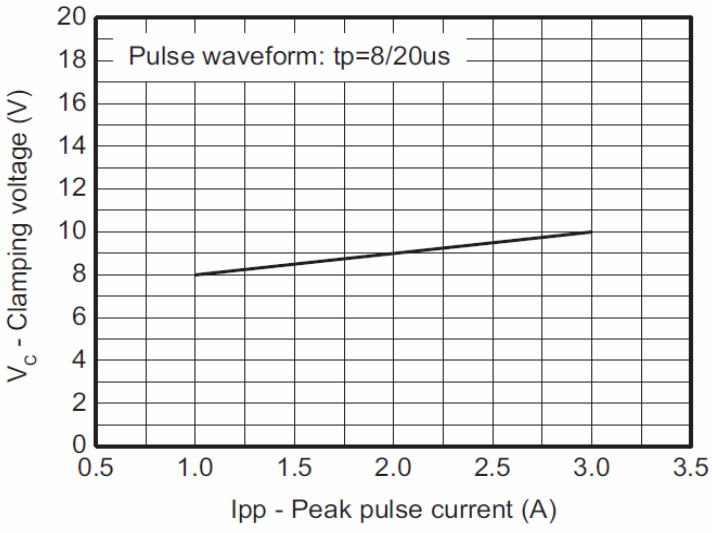
RATINGS AND CHARACTERISTICS CURVES



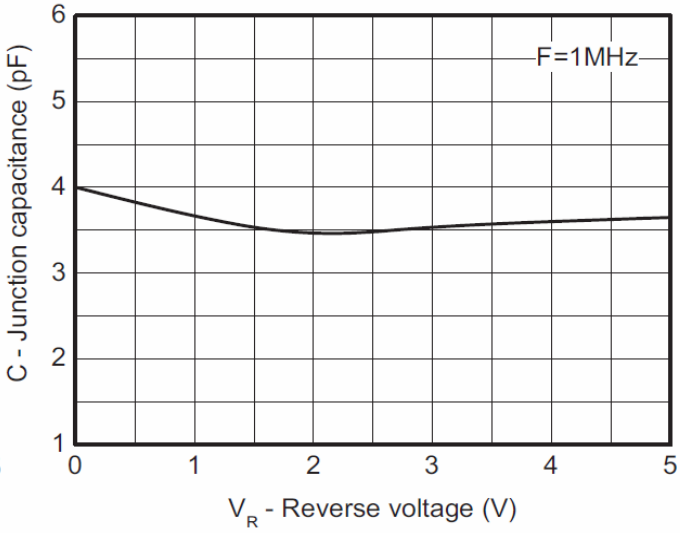
8/20us waveform



IEC61000-4-2 waveform

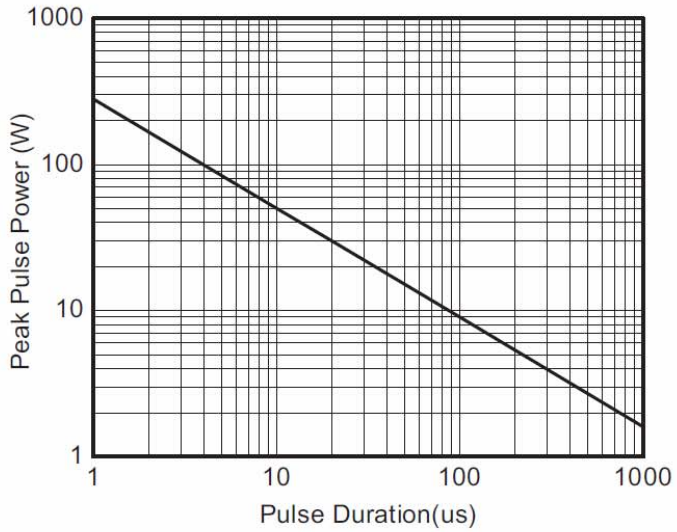


Clamping voltage vs. Peak pulse current

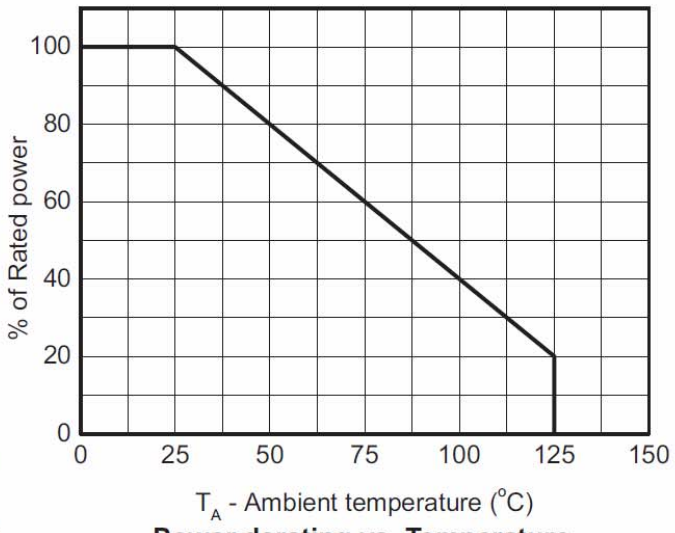


Capacitance vs. Reveres voltage

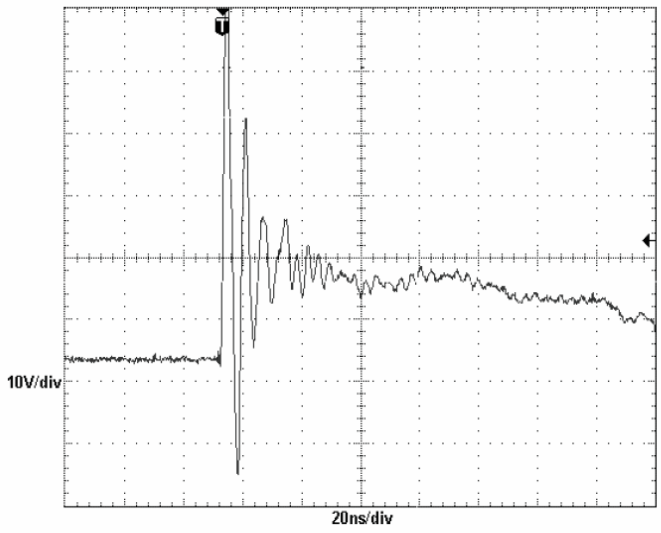
RATINGS AND CHARACTERISTICS CURVES



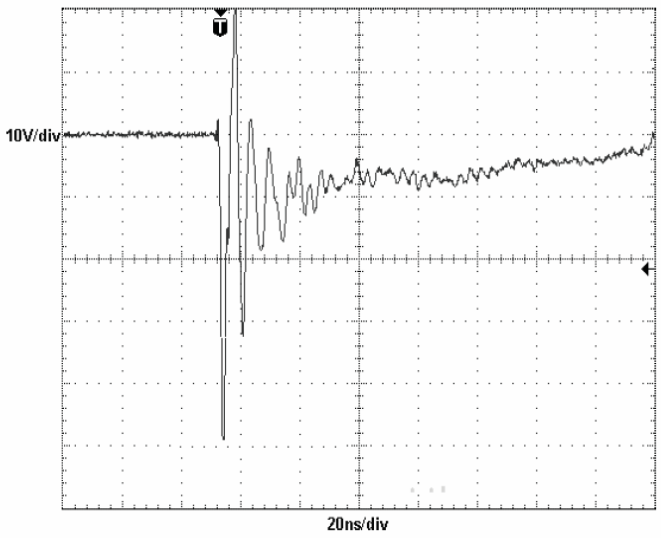
Non-Repetitive Peak Pulse Power vs. Pulse time



Power derating vs. Temperature



ESD Clamping
(IEC61000-4-2 +8KV contact)



ESD Clamping
(IEC61000-4-2 -8KV contact)