

## Features

- Transient protection for data lines to IEC61000-4-2(ESD) 15KV(air), 8KV(contact )
- Small package for use in portable electronics
- Low operating and clamping voltage

## Applications

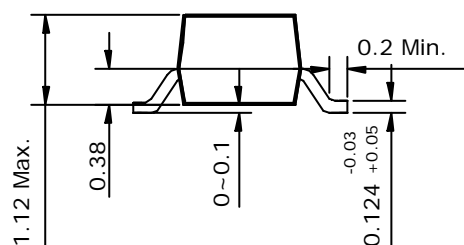
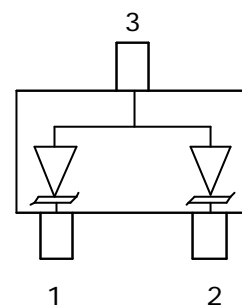
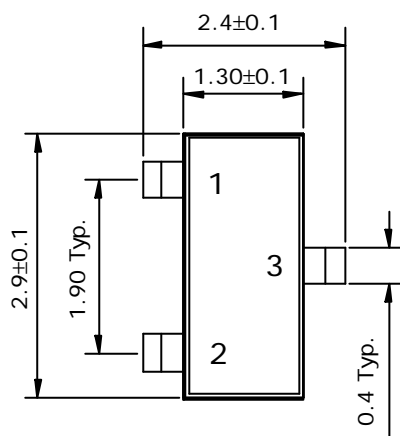
- Cellular Handsets and Accessories
- Microprocessor based equipment
- Notebooks, Desktops and Servers

## Ordering Information

Type NO.	Marking	Package Code
SDT05S	S05	SOT-23

## Outline Dimensions

unit : mm



PIN Connections  
 1. Cathode  
 2. Cathode  
 3. Anode

**Absolute maximum ratings****Ta=25°C**

Characteristic	Symbol	Ratings	Unit
Peak pulse power ( tp = 8/20 $\mu$ s )	P <sub>pk</sub>	200	W
Peak pulse current (tp = 8/20 $\mu$ s )	I <sub>pp</sub>	12	A
Lead soldering temperature	T <sub>L</sub>	260 (10sec. )	°C
Operating temperature	T <sub>J</sub>	-55 ~ 125	°C
Storage temperature	T <sub>stg</sub>	-55 ~ 150	°C

**Electrical Characteristics****Ta=25°C**

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse stand-off voltage	V <sub>RWM</sub>				5	V
Reverse breakdown voltage	V <sub>BR</sub>	I <sub>t</sub> =1mA	6			V
Reverse leakage current	I <sub>R</sub>	V <sub>RWM</sub> =5V , T=25			20	$\mu$ A
Clamping voltage	V <sub>C</sub>	I <sub>pp</sub> =1A, tp=8/20 $\mu$ s			9.8	V
Junction capacitance	C <sub>J</sub>	Pin 1 to 2 V <sub>R</sub> =0V, f=1MHz			100	pF
Junction capacitance	C <sub>J</sub>	Pin 1 to 3 and Pin 2 to 3 V <sub>R</sub> =0V, f=1MHz			150	pF

## Electrical Characteristics Curves

Fig. 1 Power derating curve

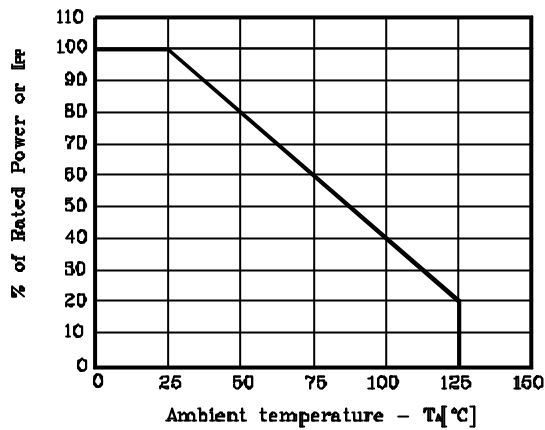


Fig. 2 None-repetitive peak pulse power vs pulse time

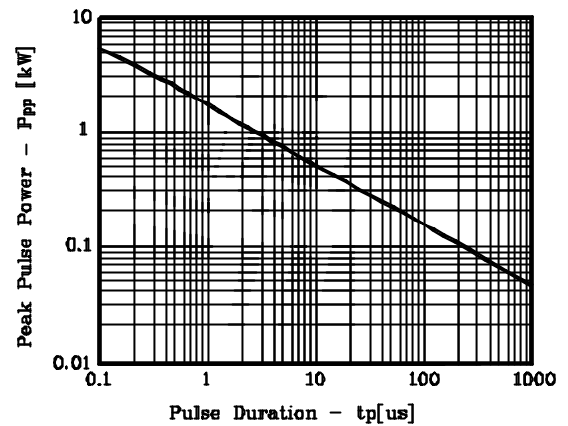


Fig. 3 Pulse Waveform

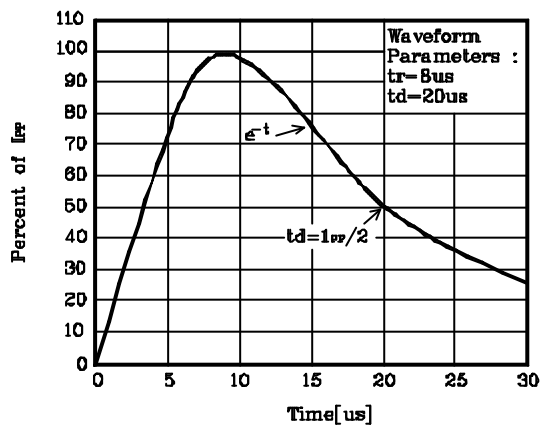


Fig. 4 Clamping voltage

