

## 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
- Protects five I/O lines

## Applications

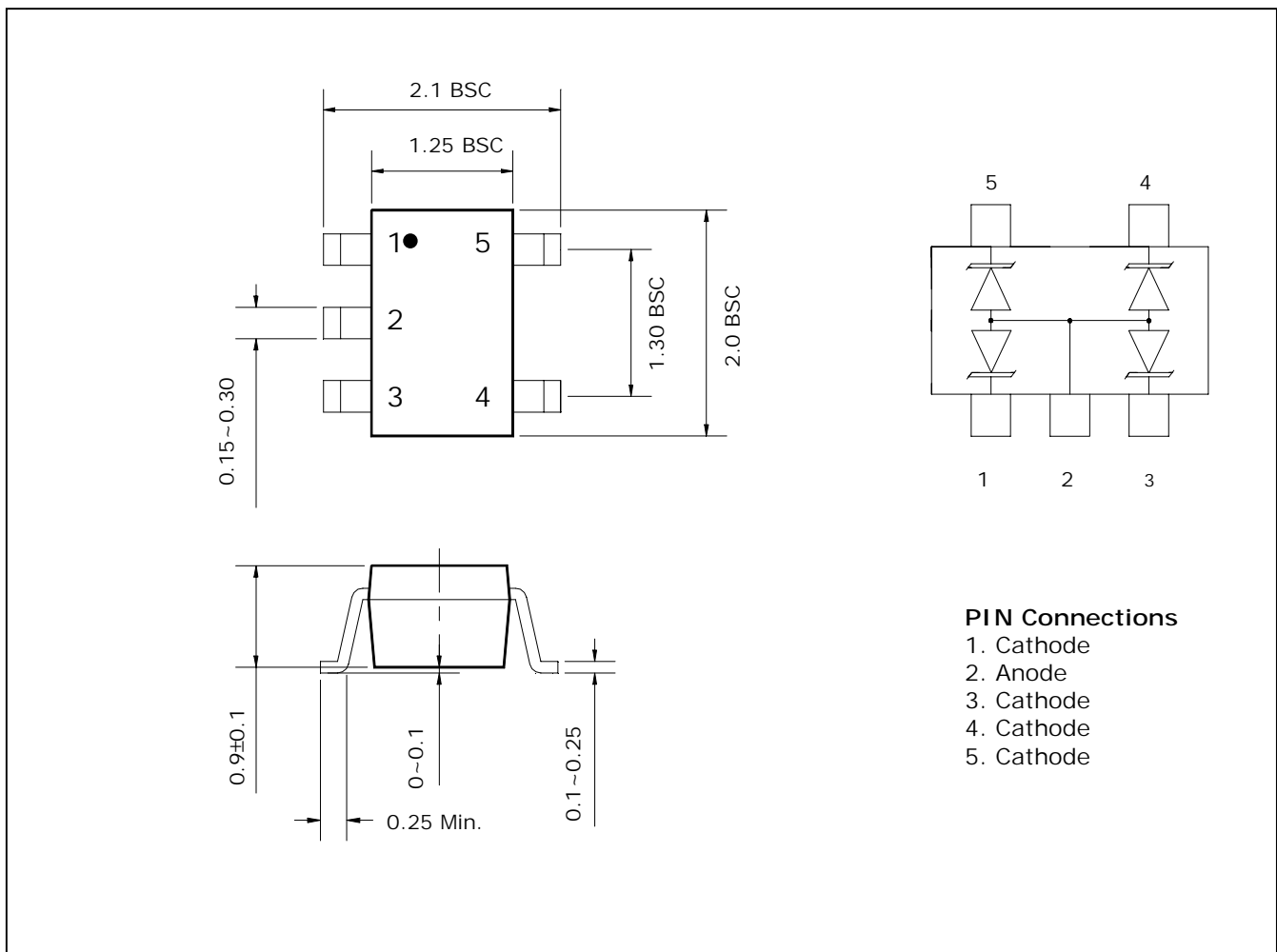
- Cell phone Handsets and Accessories
- Microprocessor based equipment
- Notebooks, Desktops and Servers

## Ordering Information

Type NO.	Marking	Package Code
SDT05H	H05	SOT-353

## Outline Dimensions

unit : mm



**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
Peak forward voltage(IF=1A, tp = 8/20 $\mu$ s)	V <sub>FP</sub>	1.5	V
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			10	$\mu$ A
Clamping voltage	V <sub>C</sub>	I <sub>PP</sub> = 1A, tp = 8/20 $\mu$ s			9.5	V
Clamping voltage	V <sub>C</sub>	I <sub>PP</sub> = 12A, tp = 8/20 $\mu$ s			12.5	V
Junction capacitance	C <sub>J</sub>	Between I/O pins and Gnd V <sub>R</sub> = 0V, f = 1MHz			150	pF

Electrical Characteristics Curves

Fig. 1 None-repetitive peak pulse power vs pulse time

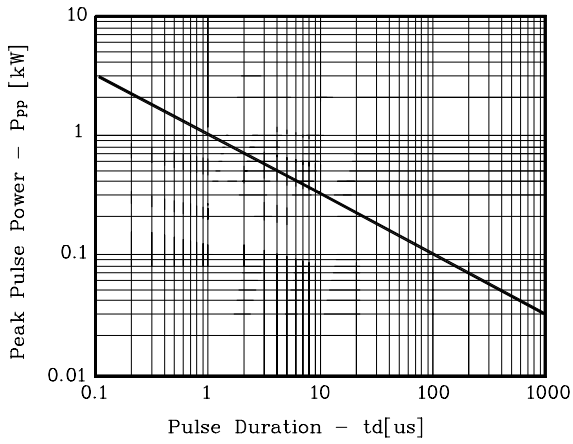


Fig. 2 Power derating curve

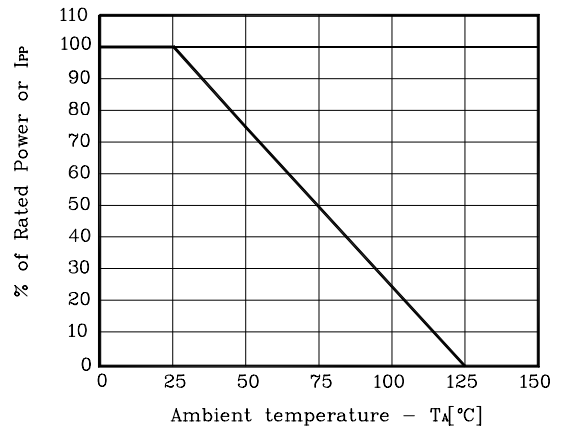


Fig. 3 Pulse Waveform

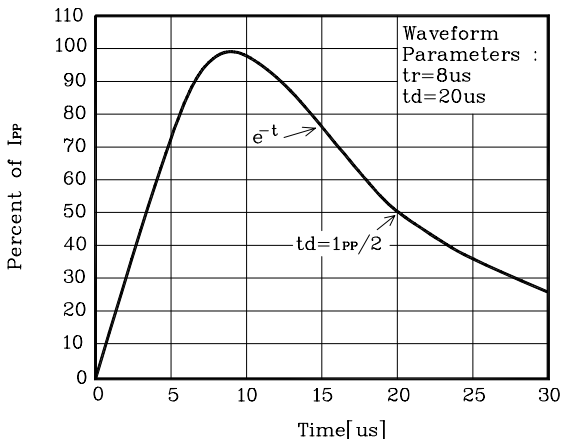


Fig. 4 Clamping voltage vs peak pulse current

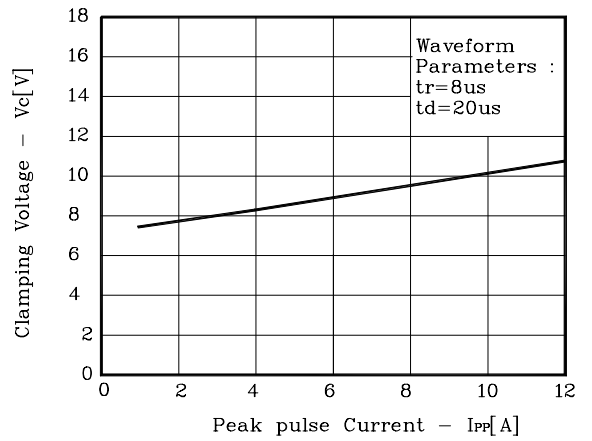


Fig. 5 Capacitance vs Reverse voltage

