

**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**

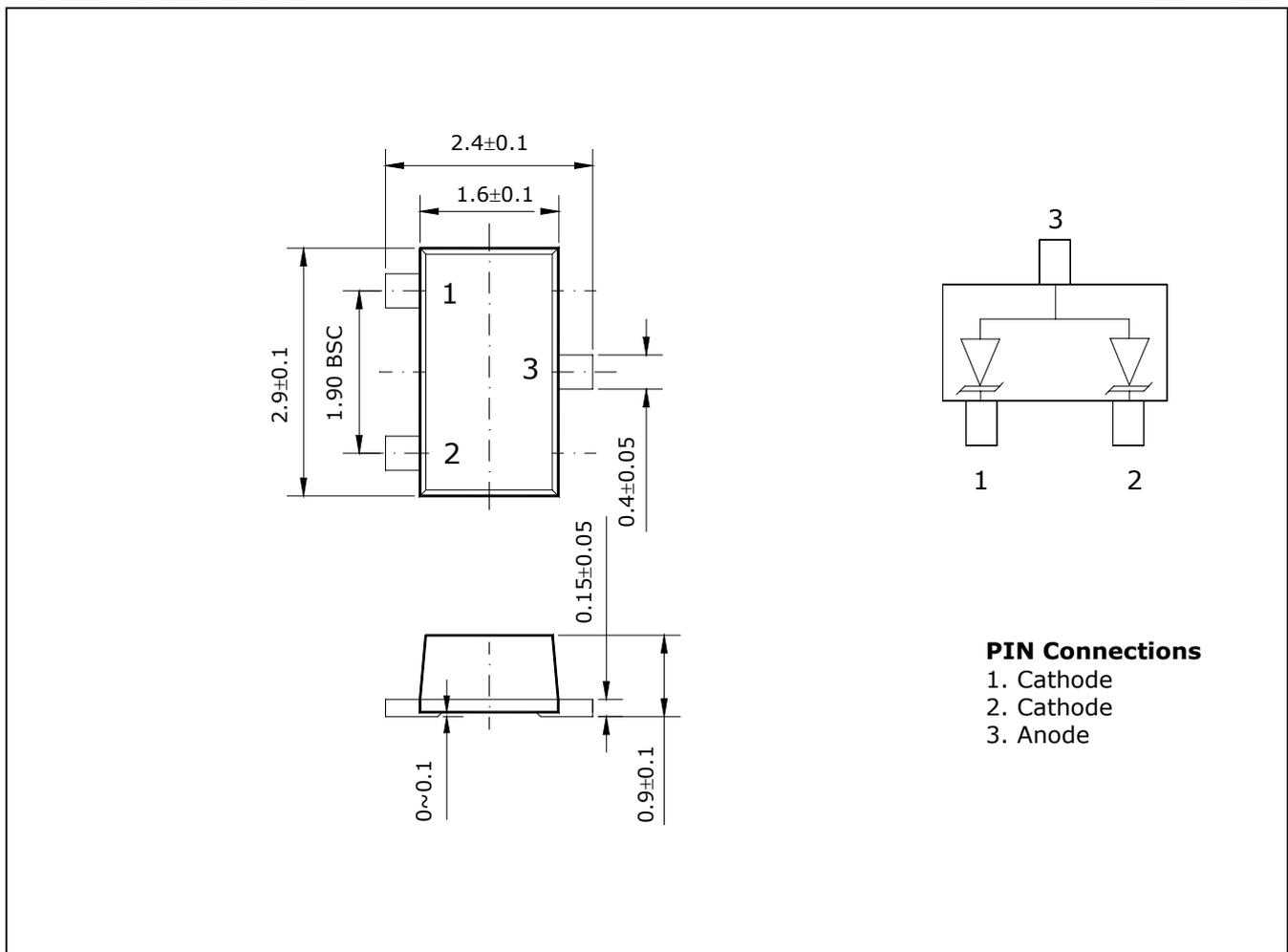
- Cellular Handsets and Accessories
- Microprocessor based equipment
- Notebooks, Desktops and Servers

**Ordering Information**

Type NO.	Marking	Package Code
SDT05SF	S05	SOT-23F

**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>	300	W
Peak pulse current (tp = 8/20 $\mu$ s )	I <sub>PP</sub>	17	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°C			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			350	pF
Junction capacitance	C <sub>J</sub>	Pin 1 to 3 and Pin 2 to 3 V <sub>R</sub> =0V, f=1MHz			400	pF

Electrical Characteristics Curves

Fig. 1 Power derating curve

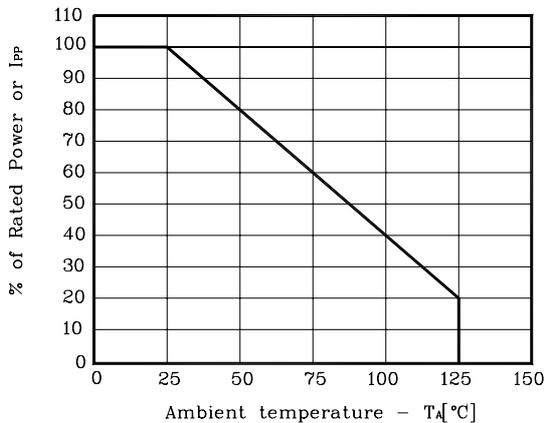


Fig. 2 None-repetitive peak pulse power vs pulse time

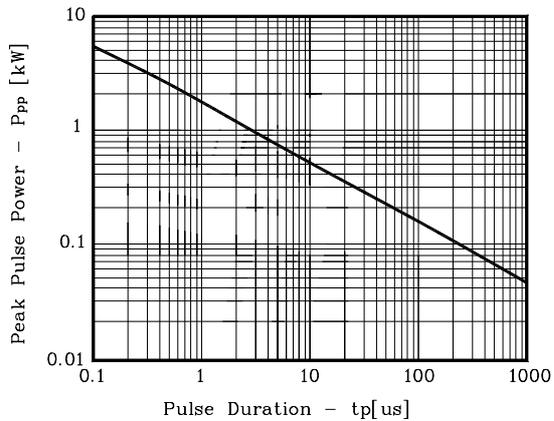


Fig. 3 Pulse Waveform

