

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

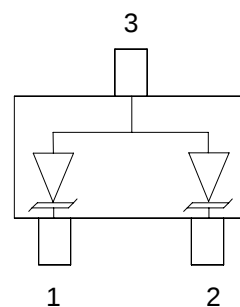
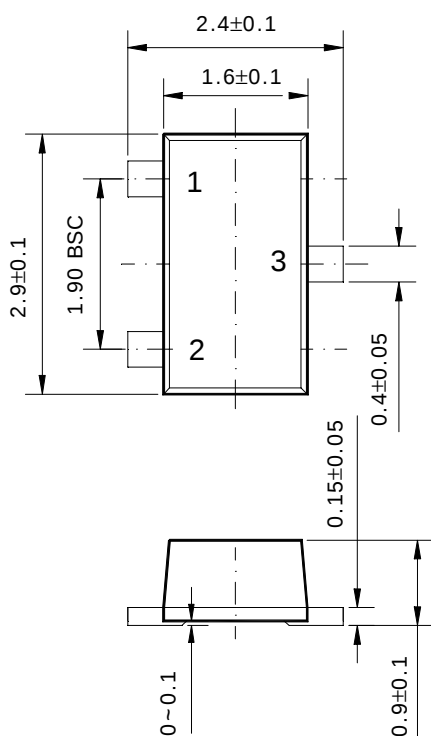
- Cellular Handsets and Accessories
- Microprocessor based equipment
- Notebooks, Desktops and Servers

Ordering Information

Type NO.	Marking	Package Code
SDT12SF	S12	SOT-23F

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 μ s)	P _{PK}	300	W
Peak pulse current (tp = 8/20 μ s)	I _{PP}	12	A
Lead soldering temperature	T _L	260 (10sec.)	°C
Operating temperature	T _J	-55 ~ 125	°C
Storage temperature	T _{stg}	-55 ~ 150	°C

Electrical Characteristics

Ta=25°C

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse stand-off voltage	V _{RWM}				12	V
Reverse breakdown voltage	V _{BR}	I _t = 1mA	13.3			V
Reverse leakage current	I _R	V _{RWM} = 12V , T = 25			1	μ A
Clamping voltage	V _C	I _{PP} = 1A, tp = 8/20 μ s			19	V
Junction capacitance	C _J	Pin 1 to 2 V _R = 0V, f = 1MHz			120	pF
Junction capacitance	C _J	Pin 1 to 3 and Pin 2 to 3 V _R = 0V, f = 1MHz			150	pF

Electrical Characteristics Curves

Fig. 1 Power derating curve

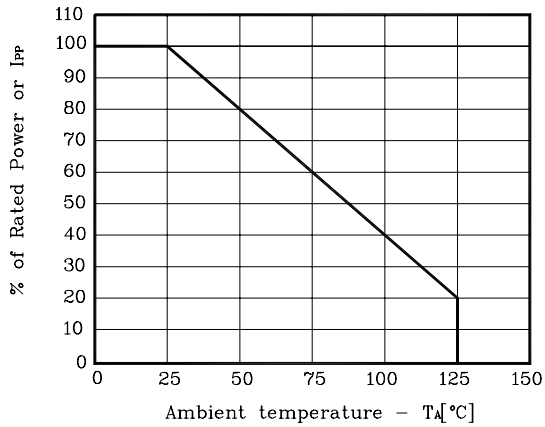


Fig. 2 None-repetitive peak pulse power vs pulse time

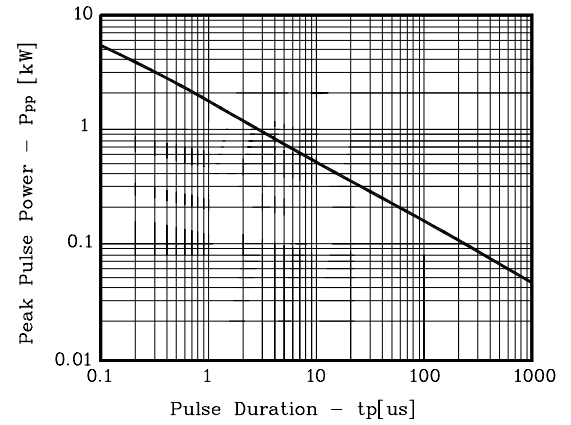


Fig. 3 Pulse Waveform

