


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

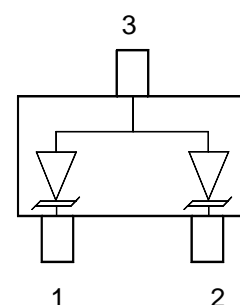
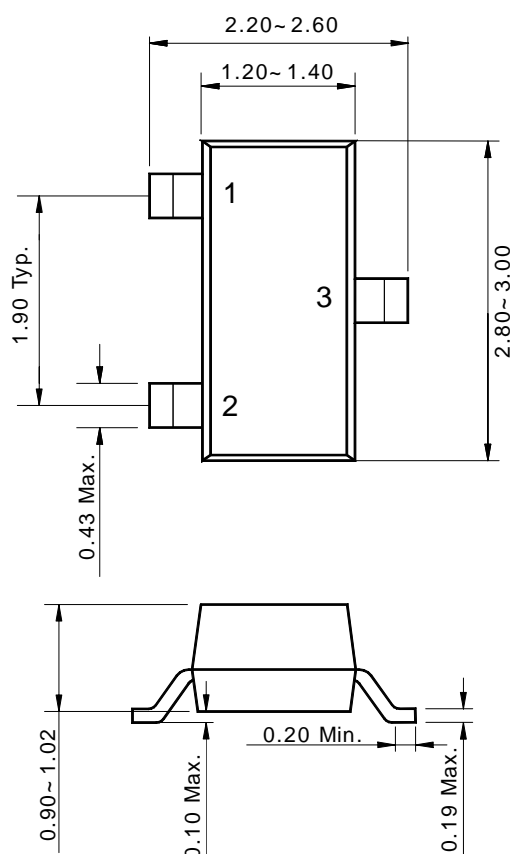
- Cellular Handsets and Accessories
- Microprocessor based equipment
- Notebooks, Desktops and Servers

Ordering Information

Type NO.	Marking	Package Code
SDT05S	S05  ① ②	SOT-23
①Device Code ②Year&Week Code		

Outline Dimensions

unit : mm



PIN Connections

1. Cathode
2. Cathode
3. Anode

Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Peak pulse power (tp = 8/20 μ s)	P _{PK}	200	W
Peak pulse current (tp = 8/20 μ s)	I _{PP}	12	A
Lead soldering temperature	T _L	260 (10sec.)	°C
Junction temperature	T _J	125	°C
Storage temperature range	T _{stg}	-55 ~ 150	°C

Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	V _{BR}	I _R = 1mA	6.0	-	7.5	V
Reverse leakage current	I _R	V _R = 5V	-	-	5	μ A
Clamping voltage	V _{C(1)}	I _{PP} = 1A, tp= 8/20 μ s	-	-	9.5	V
	V _{C(2)}	I _{PP} = 12A, tp= 8/20 μ s	5.0	-	12.5	V
Tatal capacitance	C _T	Between I/O pins and GND V _R = 0V, f= 1MHz	-	-	150	pF

Electrical Characteristics Curves

Fig. 1 P_{PP} vs t_d

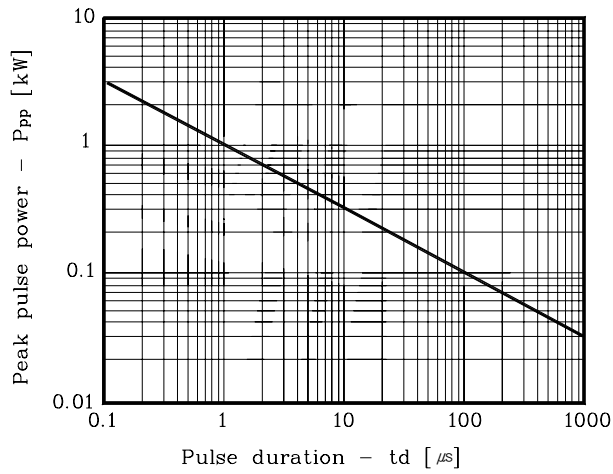


Fig. 2 Power derating curve

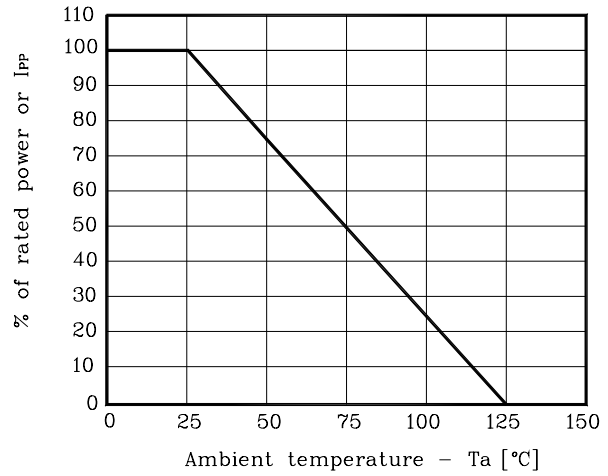


Fig. 3 Current of I_P

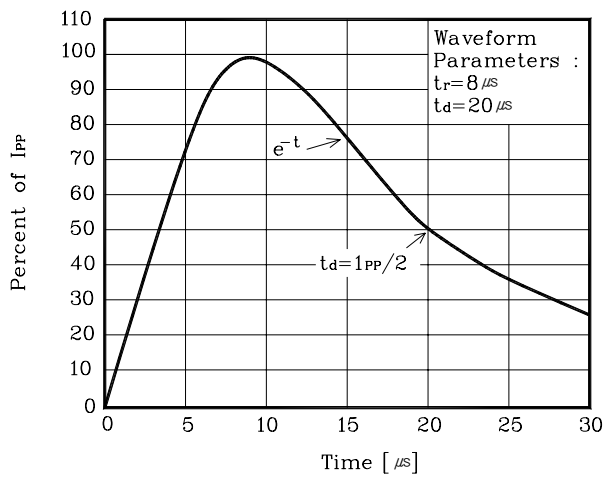


Fig. 4 V_C vs I_{PP}

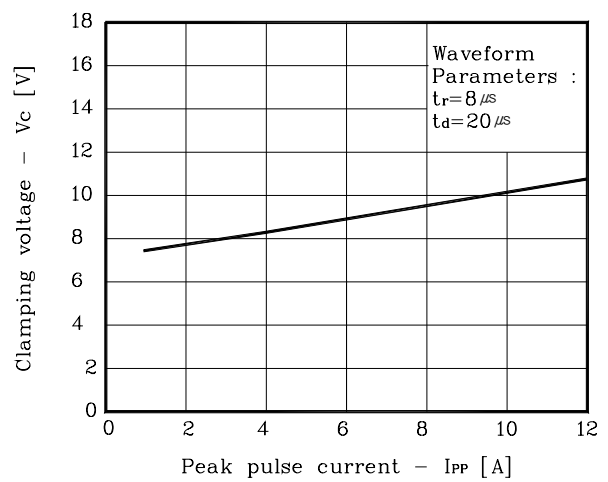
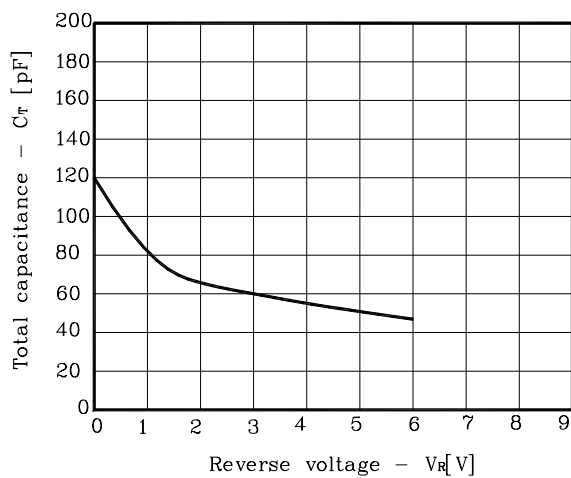


Fig. 5 C_T vs V_R



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