

SDT05H

TVS Diode

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 four 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 1.95~2.25 0.65 Typ. 5 $1.15 \sim 1.35$ 0.30 Max. 5 2 3 4 **PIN Connections** $0.85 \sim 0.95$ 1. Cathode 2. Anode 3. Cathode 4. Cathode 0.25 Min. 5. Cathode 0.10 Max.

KSD-D5R001-000

SDT05H

Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Peak pulse power (tp = $8/20 \mu$ s)	P _{PK}	200	W
Peak pulse current (tp = $8/20 \mu$ s)	${ m I}_{\sf PP}$	12	Α
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.	Тур.	Max.	Unit
Reverse breakdown voltage	V_{BR}	I _R =1mA	6.0	-	7.5	V
Reverse leakage current	I_{R}	V _R =5V	-	-	5	μA
Clamping voltage	V _{C(1)}	I _{pp} =1A, tp=8/20 μs	-	-	9.5	V
	V _{C(2)}	I _{pp} =12A, tp=8/20 μs	5.0	-	12.5	V
Tatal capacitance	C _T	Between I/O pins and GND V _R =0V, f=1MHz	-	-	150	pF

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Electrical Characteristics Curves

Fig. 3 Current of IP

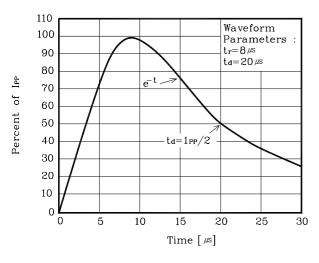


Fig. 5 C_T vs V_R

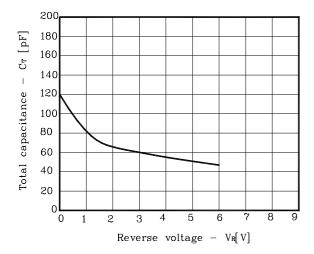


Fig. 2 Power derating curve

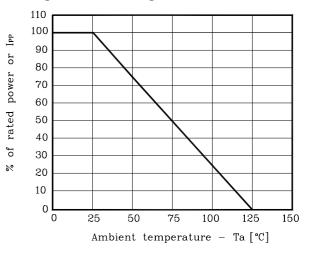
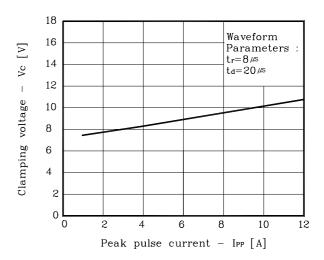


Fig. 4 V_C vs I_{PP}



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