AUK Semiconductor

SDTB6D8Q

ESD Protection Diode

Features

- Transient protection for data lines to IEC 61000-4-2(ESD) 15KV(air), 8KV(contact)
- Small package for use in portable electronics
- Bidirectional type pin configuration structure.
- Protects one I/O or power line.

Applications

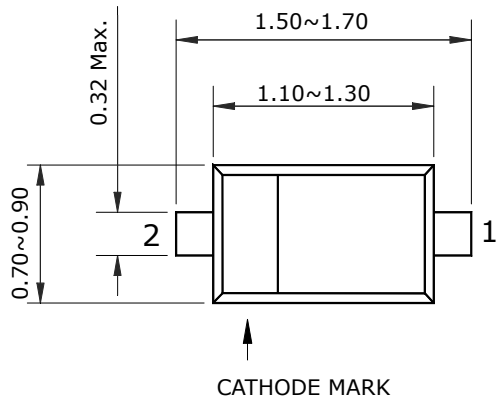
- ESD Protection

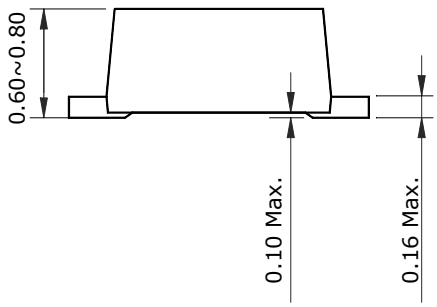
Ordering Information

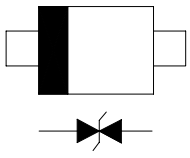
Type NO.	Marking	Package Code
SDT6D8Q	-	SOD-523

Outline Dimensions

unit : mm







PIN Connections
1. Anode
2. Anode

Absolute Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Rating	Unit
Peak Pulse Power (tp = 8/20 μs)	P_{PK}	100	W
Power dissipation	P_D	150	mW
Junction temperature	T_J	150	°C
Storage temperature	T_{stg}	-55 ~ +150	°C
Operating temperature range	T_{opr}	-55 ~ +150	°C

Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition		Min.	Typ.	Max.	Unit
Zener voltage	V_Z	I_Z=1mA		5.78	-	7.82	V
Reverse current	I_R	V_R=3.5V		-	-	0.5	μA
ESD Voltage (IEC61000-4-2)	-	C=150pF, R=330Ω (Repeat by 10 times)	Contact	±8	-	-	KV
			Air	±15	-	-	
Junction capacitance	C_j	V_R=0V, f=1MHz		-	30	-	pF

Fig. 1 V_Z-I_Z

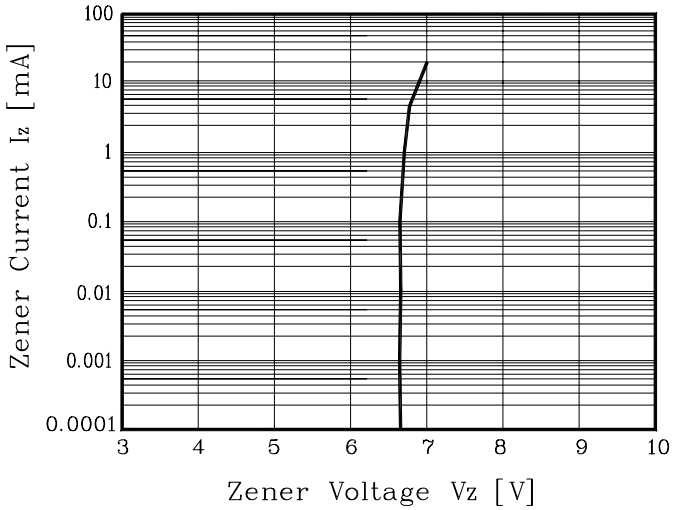


Fig. 2 I_R-V_R

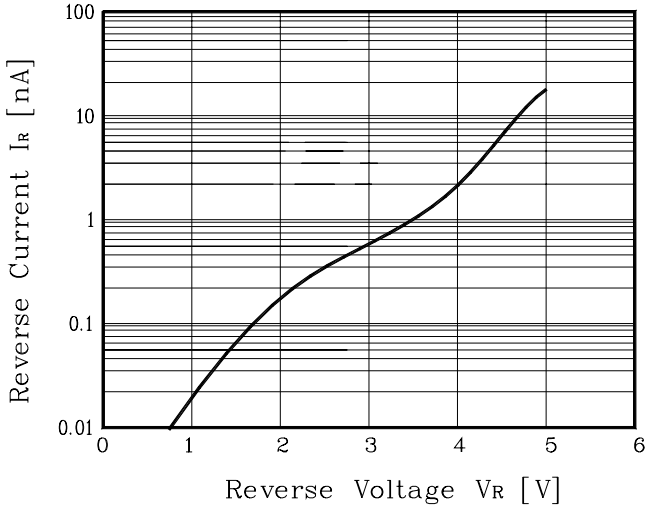
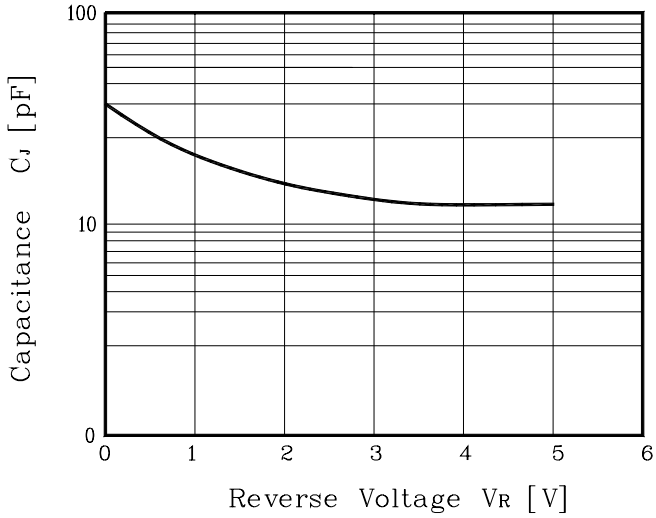


Fig. 3 C_j-V_R



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