Go to Home Page

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6ULC3P6V0

Ultra-Low Capacitance TVS

Features

- For Bi-Directional TVS Use
- Ultra Low Capacitance
- Ipp Max=4A(@8/20us)
- Stand-off Voltage:5

Applications

- USB Ports
- Cellular Handsets & Accessories
- Digital Visual Interfaces(DVI)
- Display Port
- MDDI Ports

Item	Characteristics
Wafer size	6inch
Chip size	450 * 380 um
Top Metalization	Al-Si

Maximum Ratings (Ta=25degC) (*1)

Symbol	Parameter	Value	Units
Ppk	Peak Pulse Power (tp=8/20us) Between Cathode Pad(①-②) Cathode Pad(①or②)-Anode Pad(③)	66 76	W W
Ipp	Maximum Peak Pulse Current(tp=8/20us) Between Cathode Pad(①-②) Cathode Pad(①or②)-Anode Pad(③)	3 4	A A
T_{stg}	Storage Temperature Range	-55 to+150	Deg C
T_j	Maximum Junction Temperature	-55 to+125	Deg C
V_{pp}	Electrostatic Discharge IEC61000-4-2 Air Discharge (*2) IEC61000-4-2 Contact Discharge	+/-15 +/-10	kV kV

(*1)All Rating values for reference on a SOT-23 package configuration (front: Au wire 35um, back: Au eutectic), mounted on PCB of 1.5cm by 2.5cm.

(*2) Reference only

Go to Home Page

Electrical Characteristics (Ta=25degC)

■ Bi-Direction Use(*1)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Reverse stand-off voltage	V_{RWM}	-	-	5.0	V	
Leakage current	I_R	-	-	1.0	uA	V_{RWM} = 5V
Breakdown voltage	V_{BR}	6.0	8.3	10.6	V	I_R= 1mA
Capacitance	C	-	0.3	0.5	pF	V_R = 0V, f = 1MHz
Clamping voltage1	Vc	-	-	14	V	Ipp=1A (tp=8/20us)
Clamping voltage 2	Vc	-	-	22	V	Ipp=3A (tp=8/20us)

■ Uni-Direction Use(*1)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Reverse stand-off voltage	V_{RWM}	-	-	5.0	V	
Leakage current	I_R	-	-	1.0	uA	V_{RWM} = 5V
Breakdown voltage	V_{BR}	6.0	7.5	9.0	V	I_R= 1mA
Capacitance	C	-	0.5	0.8	pF	V_R = 0V, f = 1MHz
Clamping voltage1	Vc	-	-	12	V	Ipp=1A (tp=8/20us)
Clamping voltage 2	Vc	-	-	19	V	Ipp=4A (tp=8/20us)

(*1)All Rating values for reference on a SOT-23 package configuration (front: Au wire 35um, back: Au eutectic).

Note

1. Assembly

Example: SOT-23	Example: DFN1006