フェニテックセミコンダクター株式会社

6ULC2P6V0

Ultra-Low Capacitance TVS

Features

- Ultra Low Capacitance 0.24pF(Bi-Direction Use)
- High ESD Protection Level IEC61000-4-2,Level 4(ESD) +/-10kV(Contact)
- Stand-off Voltage:5V
- For Bi-Directional TVS Use

Applications

- High speed antenna applications

Item	Characteristics
Wafer size	6inch
Chip size	360 * 280 um
Top metalization	Al-Si

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

Symbol	Parameter	Value	Units
T_{stg}	Storage temperature Range	-55 to+150	Deg C
T_j	Maximum junction temperature	-55 to+125	Deg C
Ipp	Peak pulse current(t=8/20usec)	2	A
V_{pp}	Electrostatic discharge IEC61000-4-2 Contact Discharge	±10	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.

Electrical Characteristics (Ta=25degC)

■Uni-Direction Use(*1)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Reverse stand-off voltage	V_{RWM}	-	-	5.0	V	
Leakage current	I_R	-	-	500	nA	V_{RWM} = 5.0V
Breakdown voltage	V_{BR}	6.0	-	9.0	V	I_R = 1mA
Clamping voltage	Vc		10.2	12.0	V	Ipp=1A , tp=8/20us
Capacitance	C	-	0.4	0.6	pF	V_R = 0V, f = 1MHz

■Bi-Direction Use(*1)

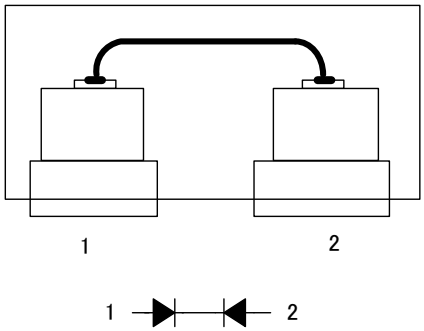
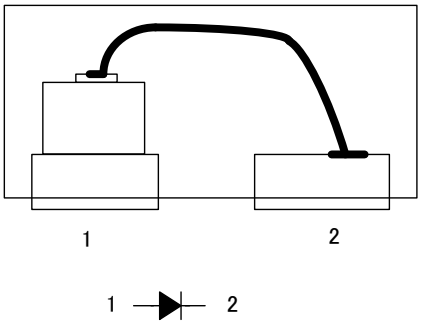
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Reverse stand-off voltage	V_{RWM}	-	-	5.0	V	
Leakage current	I_R	-	0.9	-	nA	V_{RWM} = 5.0V
Breakdown voltage	V_{BR}	-	8.6	-	V	I_R = 1mA
Clamping voltage	Vc		12.3		V	Ipp=1A , tp=8/20us
Capacitance	C	-	0.24		pF	V_R = 0V, f = 1MHz

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

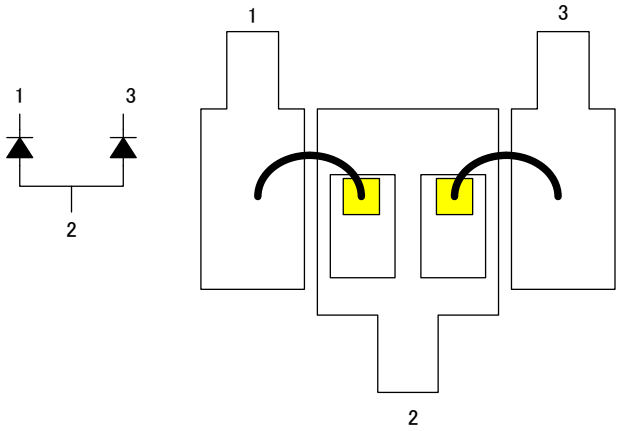
Note

1. Assembly

Example: DFN1006

Bi-Directional TVS Use	Uni-Directional TVS Use
	

Example: SOT-23

Bi-Directional TVS / Uni-Directional TVS
 Pin1 to Pin3 Bi-Directoinal TVS Pin1 or Pin3 to Pin2 Uni-Directional TVS